

Cook County Department of Public Health

Cook County Health and Hospitals System



Annual Tuberculosis Surveillance Report 2009

COOK COUNTY DEPARTMENT OF PUBLIC HEALTH

Stephen A. Martin, Jr., Ph.D., M.P.H.

Chief Operating Officer, Cook County Department of Public Health

Demian Christiansen, D.Sc., M.P.H.

*Assistant Director & Tuberculosis Program Manager,
Communicable Disease Control Unit*

Michael O. Vernon, Dr.P.H.

Director, Communicable Disease Control Unit

Copyright Information

All materials contained in this report are in the public domain and may be used and reprinted without special permission; citation as to source, however, is appreciated.

Suggested Citation

Cook County Department of Public Health. *Annual Tuberculosis Surveillance Report, 2009*. Oak Park, IL 2010.

Cook County Department of Public Health
Protecting the Health and Environment of Suburban Cook County
Affiliate, Cook County Health and Hospitals System
William T. Foley, CEO, Cook County Health and Hospitals System
Honorable Todd H. Stroger,
President, Cook County Board of Commissioners
President, Cook County Board of Health

Communicable Disease Control Unit
Cook County Department of Public Health
1010 Lake Street, Suite 300
Oak Park, IL 60301

CONTENTS

ACRONYMS, ABBREVIATIONS & DEFINITIONS	5
OVERVIEW	6
LIST OF TABLES	
Table 1. Number and Rate (per 100,000 population) of Reported Tuberculosis Cases by Selected Public Health Jurisdictions, 1993-2009	8
Table 2. Number and Percentage of Reported Tuberculosis Cases by Selected Characteristics, Suburban Cook County, 2000-2009	9
Table 3. Tuberculosis Cases by Most Frequently Reported Countries of Origin, Suburban Cook County, 2000-2009	12
Table 4. Number and Proportion of Reported Tuberculosis Cases by Site of Disease and Laboratory Results, Suburban Cook County, 2009	14
Table 5. Tuberculosis Susceptibility Results by Birthplace, Suburban Cook County, 2009	14
Table 6. Trends in the Number of Reported Tuberculosis Cases, HIV Testing and Coinfection with HIV, Suburban Cook County, 2000-2009	15
Table 7. Map Key - Suburban Cook County Municipalities and Chicago Community Areas	19
Table 8. Reported Tuberculosis Cases and Rates (per 100,000 population) by Municipality, North and West Districts, Suburban Cook County, 2007-2009	20
Table 9. Reported Tuberculosis Cases and Rates (per 100,000 population) by Municipality, South and Southwest Districts, Suburban Cook County, 2007-2009	21

LIST OF FIGURES

Figure 1. Rates of Reported Tuberculosis Cases by Selected Jurisdictions, 1993-2009	7
Figure 2. Proportion of Reported Tuberculosis Cases by Birthplace, Suburban Cook County, 2000-2009.....	10
Figure 3. Reported TB Cases by Birthplace and Race/Ethnicity, Suburban Cook County, 2009.....	11
Figure 4. Number of Years Living in the United States Prior to Receiving a Diagnosis of Tuberculosis Disease, Suburban Cook County, 2009	13
Figure 5. Mode of Treatment Administration in Reported Tuberculosis Cases, Suburban Cook County, 2000-2009.....	16
Figure 6. Completion of Tuberculosis Therapy, Suburban Cook County, 2000-2007.....	17
Figure 7. Reported Tuberculosis Case Rates (per 100,000 population) by Municipality (Suburban Cook County or Community Area (Chicago), Cook County, 2009.....	18
TECHNICAL NOTES	22

ACRONYMS, ABBREVIATIONS & DEFINITIONS

Active TB: (see TB Disease)

BCG: Bacille Calmette Guérin, a vaccination given to persons, usually infants, in countries where TB is common. BCG is NOT used in the United States.

Extrapulmonary TB: A person with *Mycobacterium tuberculosis* infection outside of the lungs, the pleural space, and the larynx (voice box). A person with extrapulmonary disease can also have pulmonary TB (see below).

LTBI: Latent Tuberculosis Infection; a person with TB infection who is not contagious.

MDR-TB: Multi-drug resistant TB. MDR-TB is defined as TB resistant to isoniazid and rifampin, the two most important first line anti-tuberculosis medications.

Pulmonary TB: A person with *Mycobacterium tuberculosis* infection of the lungs, pleural space or the larynx (voice box). A person with pulmonary TB can also have extrapulmonary TB.

QFT-G: QuantiFERON-TB Gold Test, a blood test used to detect *Mycobacterium tuberculosis*. This test cannot distinguish persons with LTBI from persons with TB disease. In contrast to the TST (see below), QFT-G can distinguish persons with either LTBI or TB disease from persons who may have received BCG vaccination. QFT-G has greater specificity than TST.

TB: Tuberculosis

TB Disease: A person with TB infection who is contagious to others; a person with TB disease can have pulmonary TB, extrapulmonary TB, or both.

TST: Tuberculin Skin Test, a test whereby purified protein derivative (PPD) is injected under the skin in the forearm. Persons with TB infection react to the PPD which results in a bump (induration) where the PPD was injected. Qualified healthcare personnel can measure the size of the bump and determine whether the test is positive or negative. The TST cannot distinguish persons with LTBI from persons with TB disease. The TST cannot distinguish persons with TB infection (LTBI or TB disease) from persons who may have received BCG vaccination (such as persons born overseas).

XDR-TB: Extensively drug resistant TB. XDR-TB is defined as MDR-TB plus TB that is resistant to any fluoroquinolone plus resistance to one of the three injectable drugs (i.e., amikacin, kanamycin, or capreomycin).

OVERVIEW

Report Highlights

Case Counts:

- 100 cases (rate: 4.0 per 100,000 population) were reported in suburban Cook County in 2009, unchanged from the number of cases reported in 2008 (Table 1).
- The North District accounted for 59% of reported cases in 2009 (Table 8).
- Ninety percent (90%) of municipalities with 2 or more cases and 100% of municipalities with 4 or more cases were located in the North District (Tables 8 and 9).
- Eight cases lived in Skokie, 7 lived in Des Plaines, and 5 lived in Hoffman Estates. Each of the following municipalities had 4 TB cases: Evanston, Morton Grove, Mount Prospect and Palatine (Table 8).
- Sixty nine percent (69%) of cases were either Asian/Pacific Islander (45%) or Hispanic (24%) (Table 2).

TB Burden in Foreign-born Persons:

- The proportion of TB cases in foreign-born persons increased from 51% in 2000 to 74% in 2009 (Figure 2).
- In 2009, foreign-born persons with TB disease came from 18 different countries (Table 3); however, the majority (61%) came from Mexico (23%), India (23%), and the Philippines (15%). This same pattern in foreign-born TB cases has been observed since 2000 (Table 3).
- Among foreign-born persons diagnosed with TB, 78% arrived 5 or more years prior to receiving a diagnosis of TB disease (Figure 4).

Drug Resistance:

- In 2009, 11 cases of TB were resistant to isoniazid; two were classified as MDR-TB (i.e., were resistant to isoniazid and rifampin; Table 5).

Coinfection with HIV:

- Seven percent (7%) of persons diagnosed with TB were coinfected with HIV; these persons are defined, per AIDS case definition, as having AIDS.

Directly Observed Therapy:

- In 2009, 88% of patients received DOT. Among patients with pulmonary TB disease, 95% received DOT.

Completion of Therapy:

- In 2007, 96% of persons with TB disease completed treatment.
- Among persons diagnosed in 2007 and who were eligible to complete TB treatment in 12 months*, 85% of cases did so. This is slightly below the Healthy People 2010 goal of 90%.

* Eligible cases are persons who were alive at the time of TB diagnosis and did not die during therapy, and excludes persons with TB resistant to rifampin and pediatric cases (<15 years) with a diagnosis of meningeal, bone/joint, or miliary TB.

Figure 1. Rates of Reported Tuberculosis Cases by Selected Jurisdictions, 1993-2009

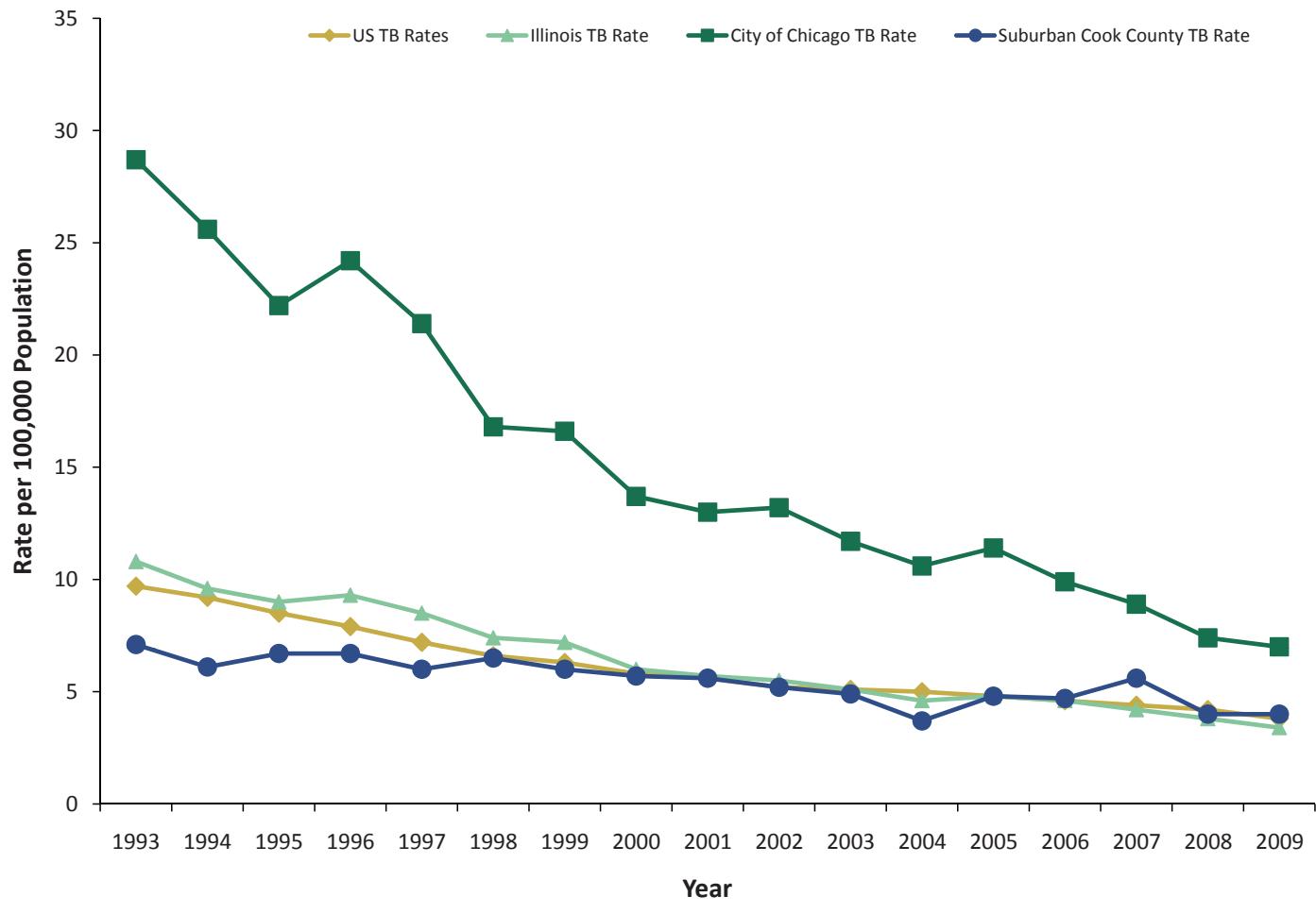


Figure 1. In 2009, 100 cases of tuberculosis (TB) were reported in suburban Cook County. The 2009 TB rate was 4.0 per 100,000 population. This represents no change in the number or rate of TB cases reported in 2008, which was also 100 (rate: 4.0 per 100,000). TB rates declined 43%, from 7.1 per 100,000 in 1993 to 4.0 per 100,000 in 2009. The average annual decline in TB rates in suburban Cook County between 1993 and 2000 was 2.7% per year; between 2000 and 2009, the decline slowed somewhat to an average of 2.3% per year.

Steeper declines in both numbers and rates of TB occurred nationally, in Illinois, and particularly in Chicago. Between 1993 and 2009, reported rates of TB in Chicago declined 75.6% from 28.7 per 100,000 to 7.0 per 100,000 in 2009.

Table1. Number and Rate (per 100,000 population) of Reported Tuberculosis Cases by Selected Public Health Jurisdictions, 1993-2009

Year	Suburban Cook County		City of Chicago		Illinois		USA	
	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*
1993	165	7.1	798	28.7	1,235	10.8	25,107	9.7
1994	142	6.1	714	25.6	1,101	9.6	24,205	9.2
1995	155	6.7	619	22.2	1,024	9.0	22,728	8.5
1996	155	6.7	674	24.2	1,060	9.3	21,210	7.9
1997	140	6.0	597	21.4	974	8.5	19,751	7.2
1998	150	6.5	469	16.8	850	7.4	18,287	6.6
1999	140	6.0	463	16.6	825	7.2	17,501	6.3
2000	141	5.7	398	13.7	743	6.0	16,310	5.8
2001	139	5.6	377	13.0	707	5.7	15,945	5.6
2002	130	5.2	382	13.2	680	5.5	15,056	5.2
2003	122	4.9	339	11.7	633	5.1	14,836	5.1
2004	91	3.7	308	10.6	569	4.6	14,500	5
2005	120	4.8	329	11.4	596	4.8	14,067	4.8
2006	116	4.7	287	9.9	569	4.6	13,727	4.6
2007	139	5.6	258	8.9	521	4.2	13,288	4.4
2008	100	4.0	214	7.4	469	3.8	12,904	4.2
2009	100	4.0	202	7.0	418	3.4	11,540	3.8

* Rates (per 100,000 population) for years 1993-1999 calculated using 1990 US census data; rates for 2000-2009 calculated using 2000 US census data.

Table 2. Number and Percentage of Reported Tuberculosis Cases by Selected Characteristics, Suburban Cook County, 2000-2009

Characteristic	Year																			
	2000		2001		2002		2003		2004		2005		2006		2007		2008		2009	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Sex																				
Male	75	(53)	74	(53)	73	(55)	70	(57)	53	(58)	57	(48)	64	(55)	73	(52)	58	(58)	47	(47)
Female	67	(47)	66	(47)	59	(45)	52	(43)	38	(42)	63	(53)	52	(45)	67	(48)	42	(42)	53	(53)
Age Groups (Y)																				
<5	6	(4)	7	(5)	2	(2)	1	(1)	1	(1)	3	(3)	4	(3)	3	(2)	2	(2)	2	(2)
5-14	3	(2)	0	(0)	0	(0)	1	(1)	0	(0)	3	(3)	4	(3)	2	(1)	1	(1)	0	(0)
15-24	16	(11)	16	(11)	13	(10)	17	(14)	5	(5)	15	(13)	7	(6)	14	(10)	4	(4)	13	(13)
25-44	50	(35)	43	(31)	54	(41)	38	(31)	31	(34)	43	(36)	36	(31)	32	(23)	40	(40)	40	(40)
45-64	34	(24)	42	(30)	31	(23)	44	(36)	33	(36)	31	(26)	35	(30)	58	(41)	30	(30)	22	(22)
65+	33	(23)	32	(23)	32	(24)	21	(17)	21	(23)	25	(21)	30	(26)	31	(22)	23	(23)	23	(23)
Race/Ethnicity																				
White, not Hispanic	31	(22)	34	(24)	29	(22)	28	(23)	23	(25)	21	(18)	19	(16)	27	(19)	21	(21)	14	(14)
Black, not Hispanic	44	(31)	32	(23)	23	(17)	30	(25)	19	(21)	30	(25)	19	(16)	16	(11)	24	(24)	10	(10)
Hispanic	20	(14)	26	(19)	25	(19)	19	(16)	21	(23)	24	(20)	25	(22)	28	(20)	17	(17)	24	(24)
Asian/Pacific Islander	45	(32)	47	(34)	55	(42)	45	(37)	28	(31)	45	(38)	53	(46)	69	(49)	38	(38)	45	(45)
Other	2	(1)	1	(1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	7	(7)
TOTAL	142	(100)	140	(100)	132	(100)	122	(100)	91	(100)	120	(100)	116	(100)	140	(100)	100	(100)	100	(100)

Table 2. In 2009, the majority of active TB cases were female (53%), aged 25 years or older (85%) and were classified as Asian/Pacific Islander (45%). Pediatric cases (i.e., those <15 years of age) accounted for 2 (2%) of all TB cases in 2009.

Figure 2. Proportion of Reported Tuberculosis Cases by Birthplace,
Suburban Cook County, 2000-2009

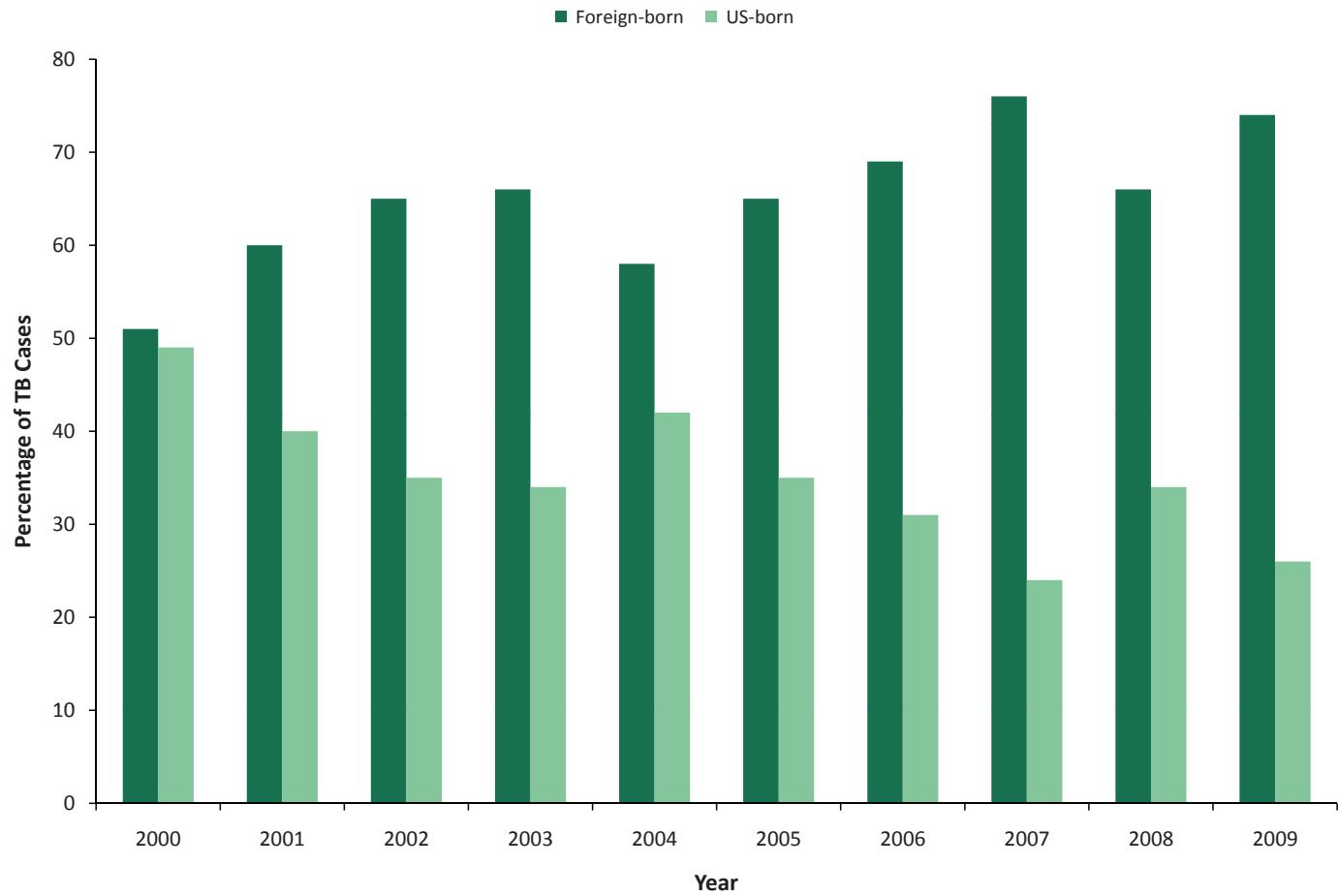
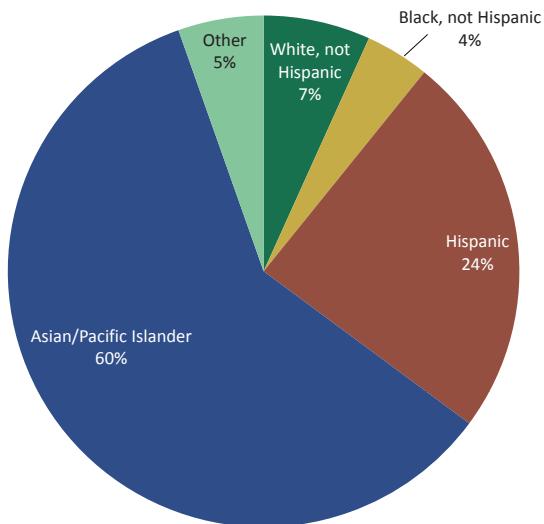


Figure 2. The proportion of TB cases in foreign-born persons has increased from 51% in 2000 to 74% in 2009.

Figure 3. Reported TB Cases by Birthplace and Race/Ethnicity, Suburban Cook County, 2009

Foreign-born (n=74)



US-born (n=26)

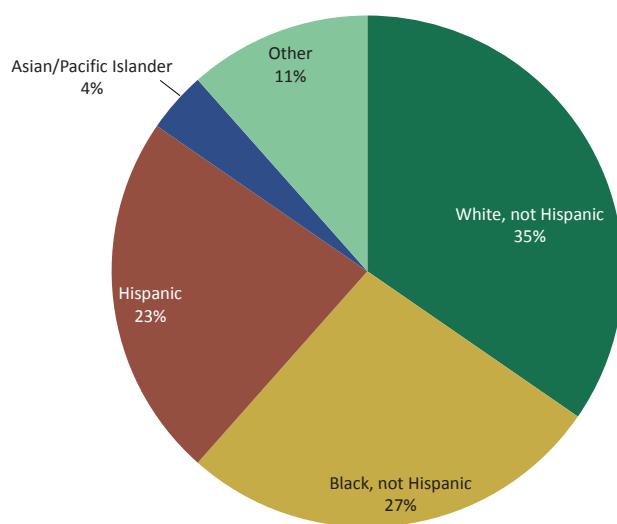


Figure 3. Important race/ethnicity differences exist in the distribution of cases by birthplace. Among foreign-born persons, Asian/Pacific Islanders accounted for the majority (60%) of cases. By comparison, non-Hispanic Whites accounted for the highest proportion of cases (35%) among U.S.-born TB cases.

**Table 3. Tuberculosis Cases by Most Frequently Reported Countries of Origin,
Suburban Cook County, 2000 - 2009**

Birthplace	Year									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*
India	21	25	31	16	13	24	23	30	10	17
Mexico	14	21	18	14	13	19	18	18	11	17
Philippines	9	6	7	13	10	12	16	22	17	11
Poland	6	6	4	3	3	2	1	4	2	2
South Korea	4	1	6	2	2	4	2	5	1	2
Pakistan	2	5	3	2	1	1	1	5	1	3
Vietnam	0	3	1	3	0	1	2	1	2	6
China	3	0	1	3	1	0	3	1	3	2
Nigeria	2	0	0	4	0	1	0	0	1	1
Thailand	1	2	0	1	0	0	1	1	0	2
Burma	1	0	2	1	0	0	0	1	1	0
Guatemala	0	1	1	1	1	0	0	2	0	0
Haiti	0	0	0	3	0	1	0	1	0	1
Romania	0	0	1	0	1	1	2	0	1	0
Russia	1	0	0	1	0	1	0	1	2	0
Bosnia and Herzegovina	0	0	1	1	2	1	0	0	0	0
Italy	0	0	1	1	0	1	0	2	0	0
North Korea	0	0	0	1	0	0	0	1	3	0
Peru	0	0	0	1	1	1	0	2	0	0
Ukraine	1	0	0	1	1	0	0	2	0	0

* Other countries of origin in 2009 included the following: Cameroon, Colombia, Honduras, Iraq, Japan, Lithuania and Nepal.

Table 3. In 2009, 74 foreign-born persons with active TB came from 18 different countries. Three countries accounted for 61% of all foreign born cases: Mexico (n=17; 23%), India (n=17; 23%) and the Philippines (n=11; 15%).

Figure 4. Number of Years Living in the United States Prior to Receiving a Diagnosis of Tuberculosis Disease, Suburban Cook County, 2009

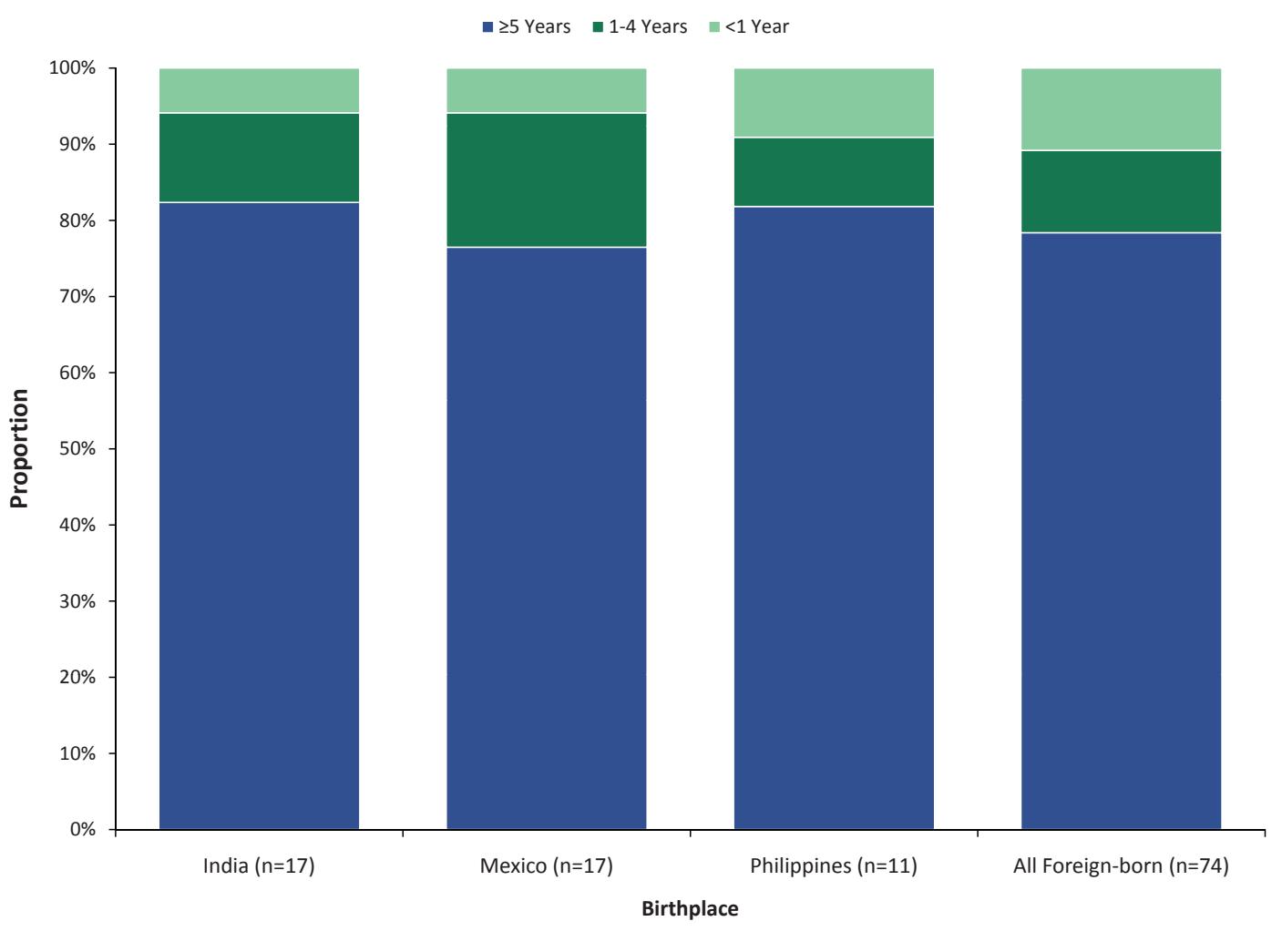


Figure 4. Among all foreign-born TB cases reported in 2009, 78% arrived in the U.S. 5 or more years prior to receiving a diagnosis of TB disease. This pattern is consistent among foreign-born persons from the top three countries (i.e., India, Mexico, and the Philippines) in 2009.

Table 4. Number and Proportion of Reported Tuberculosis Cases by Site of Disease and Laboratory Results, Suburban Cook County, 2009

Site of Disease	Total Cases		Culture positive	
	No.	(%)	No.	(%)
Pulmonary Only	48	(48)	44	(92)
Extrapulmonary Only	42	(42)	25	(60)
Both	10	(10)	8	(80)
Total	100	(100)	77	(77)

Table 4. Forty eight reported TB cases in 2009 had pulmonary only TB compared to 42 cases with extrapulmonary only TB (no pulmonary involvement). Seventy seven percent (77%) of all cases were culture positive.

Table 5. Tuberculosis Susceptibility Results by Birthplace, Suburban Cook County, 2009

Birthplace	Cases with Susceptibility Results		Any Drug Resistance		INH-Resistant		MDR-TB	
	No.		No.	(%)	No.	(%)	No.	(%)
Foreign-born	53		9	(17)	8	(15)	2	(4)
US-born	21		0	(0)	0	(0)	0	(0)
Total	74		9	(12)	8	(11)	2	(3)

Table 5. Seventy four TB cases in 2009 had susceptibility testing performed. Of reported cases with susceptibility results 53/74 (72%) were born overseas and 21/74 (28%) were born in the U.S. Among foreign-born TB cases with susceptibility results, 9/53 (17%) were resistant to at least one anti-tuberculosis medication, 8/53 (15%) were resistant to isoniazid (INH), and 2/53 (4%) had multi-drug resistant TB (MDR-TB). There were no reported cases of extensively drug resistant TB (XDR-TB) in suburban Cook County in 2009.

Table 6. Trends in the Number of Reported Tuberculosis Cases, HIV Testing and Coinfection with HIV, Suburban Cook County, 2000-2009

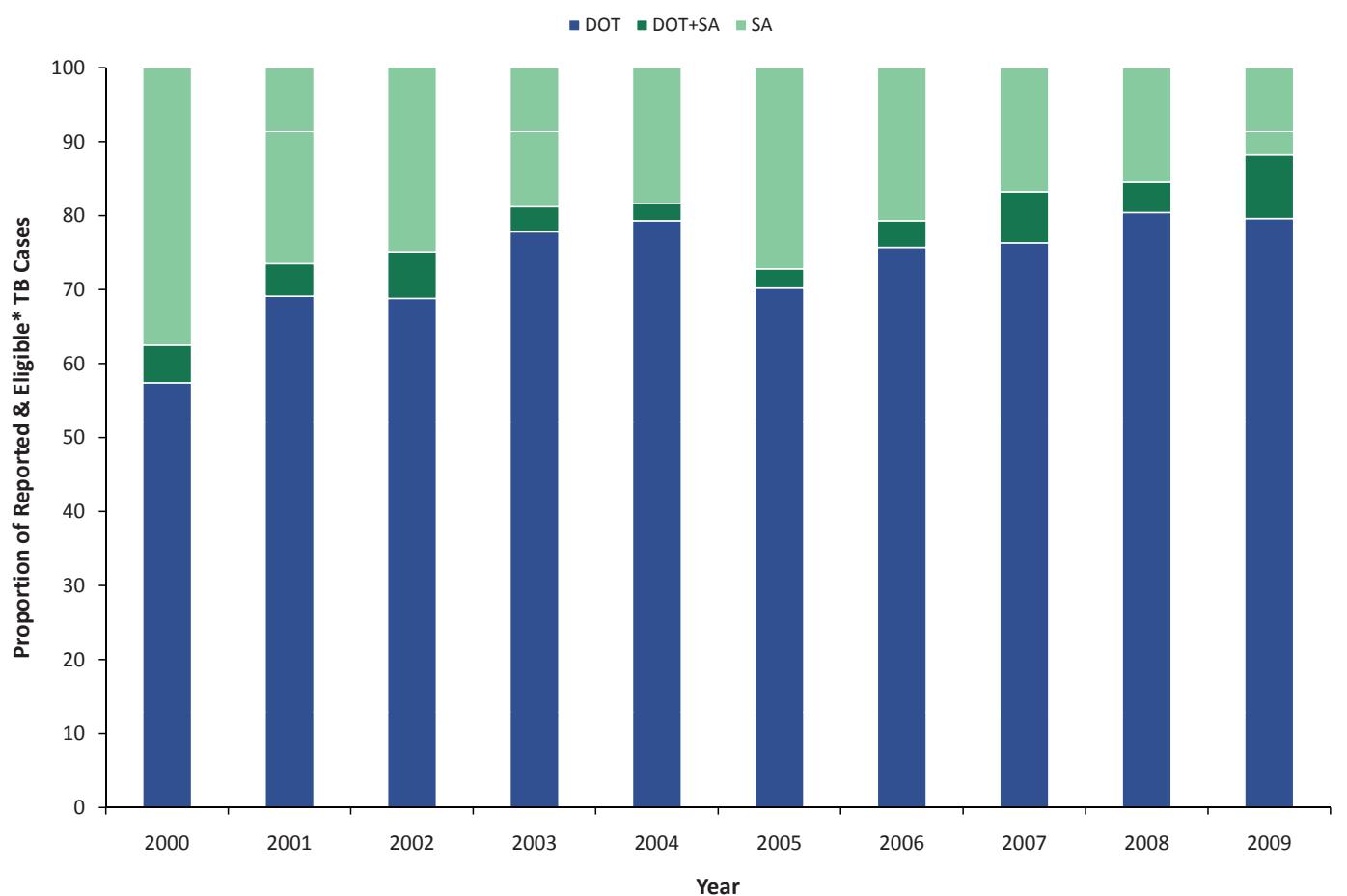
Year	TB Cases		Tested for HIV		Coinfected with HIV*	
	No.		No.	(%)	No.	(%)
2000	141		36	(25)	5	(14)
2001	139		32	(23)	7	(22)
2002	130		72	(55)	5	(7)
2003	122		89	(73)	7	(8)
2004	91		75	(82)	†	†
2005	120		94	(78)	6	(6)
2006	116		85	(73)	†	†
2007	139		109	(78)	6	(6)
2008	100		87	(87)	9	(10)
2009	100		77	(77)	5	(7)

* Persons with HIV who receive a TB diagnosis are defined as having AIDS.

† Cells with small counts (1-4) have been suppressed.

Table 6. Testing for HIV among reported cases of TB increased from 25% in 2000 to 77% in 2009. Among TB cases with HIV testing results in 2009, 7% were coinfected (i.e., had HIV infection and TB infection). Persons with TB and HIV coinfection are classified, by AIDS surveillance case definition, as having AIDS.

**Figure 5. Mode of Treatment Administration in Reported Tuberculosis Cases,
Suburban Cook County, 2000-2009**



* Percentage includes cases alive at diagnosis, who did not die during therapy with one or more anti-tuberculosis drugs prescribed and excludes persons with missing or unknown information regarding mode of treatment administration.

Figure 5. The proportion of TB cases receiving directly observed therapy (DOT), whether DOT only or DOT with some self-administered (SA) therapy has increased over time. The proportion of reported TB cases receiving directly observed therapy (DOT only or DOT+SA) increased from 63% in 2000 to 88% in 2009. In 2009, the proportion of pulmonary TB patients receiving DOT or DOT+SA was approximately 95% (data not shown).

Figure 6. Completion of Tuberculosis Therapy, Suburban Cook County, 2000-2007

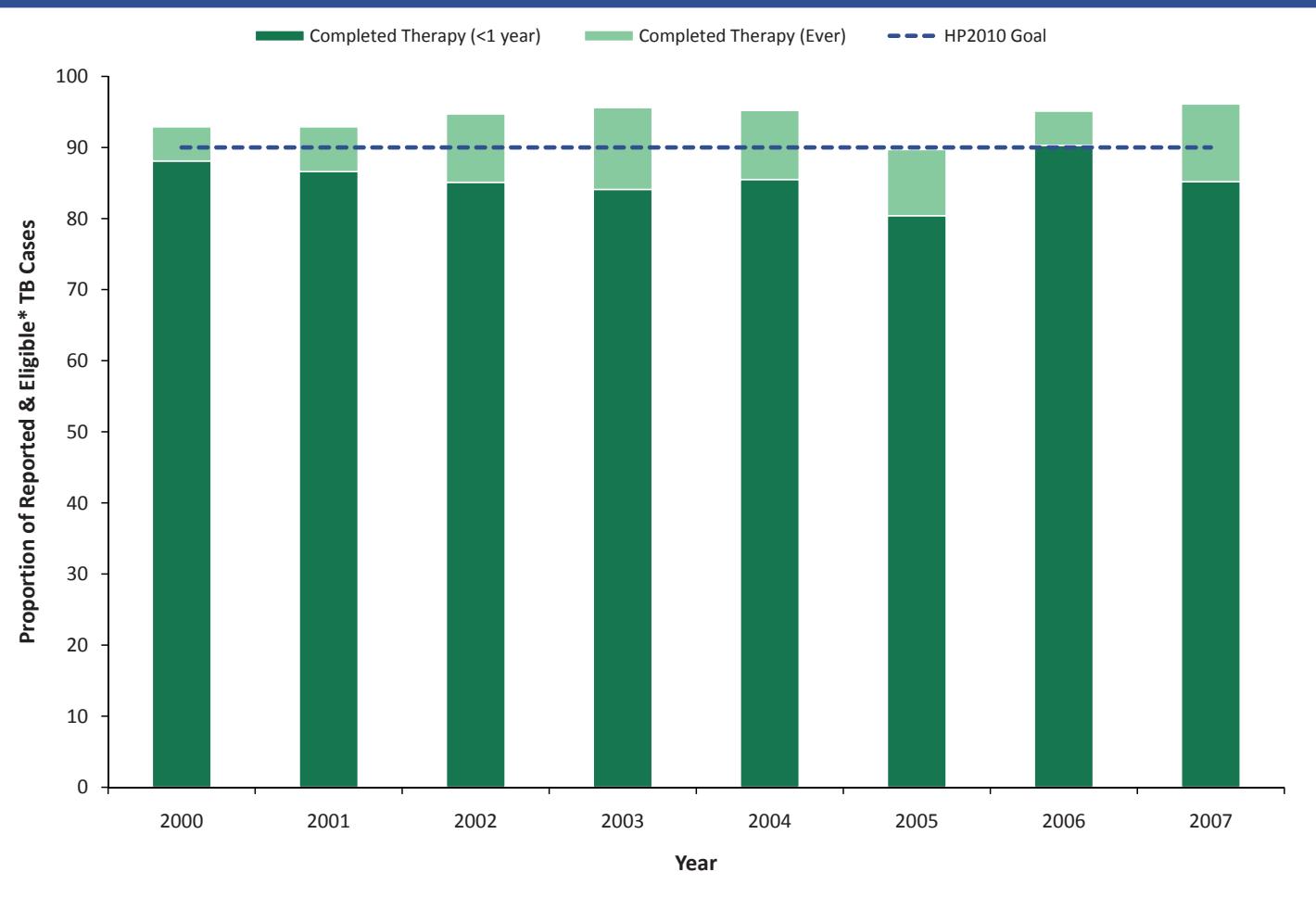
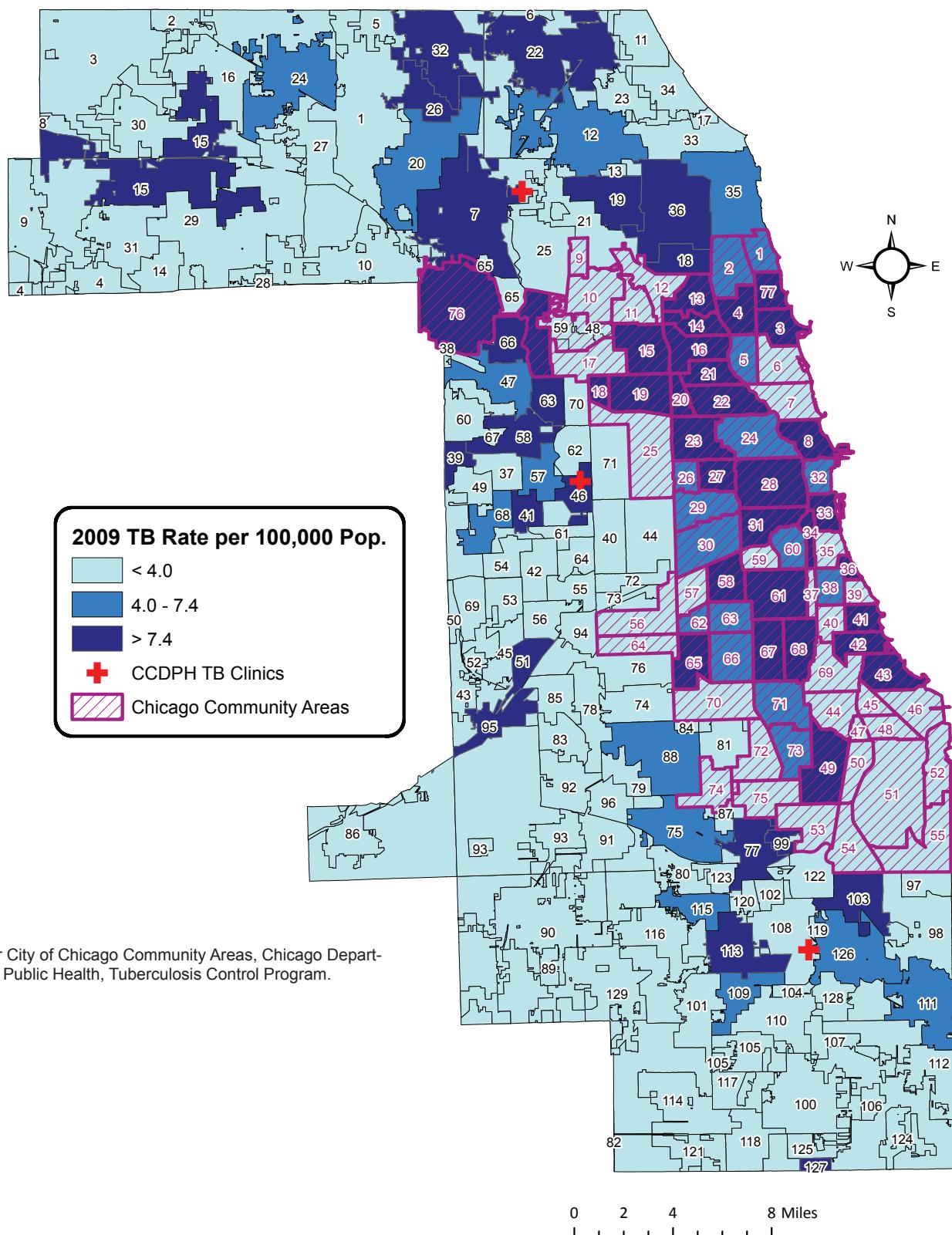


Figure 6. In 2007, the most recent year for which data on completion of tuberculosis therapy are available, 96% of reported TB cases who were eligible* completed treatment. Between 2000 and 2007, 95% of persons with TB completed treatment.

In 2007, 85% of eligible* persons completed treatment in less than one year. This is slightly below the Department of Health and Human Services Healthy People 2010 goal of 90%.

* Eligible cases are persons who were alive at the time of TB diagnosis and did not die during therapy, and excludes persons with TB resistant to rifampin and pediatric cases (<15 years) with a diagnosis of meningeal, bone/joint, or miliary TB.

Figure 7. Reported Tuberculosis Case Rates (per 100,000 population) by Municipality (Suburban Cook County or Community Area (Chicago), Cook County, 2009



**Table 7. Map Key - Suburban Cook County Municipalities
and Chicago Community Areas**

City/Town/Com. Area	Ref #	City/Town/Com. Area	Ref #	City/Town/Com. Area	Ref #	City/Town/Com. Area	Ref #
Arlington Heights	1	North Riverside	61	Richton Park	121	East side	52
Barrington	2	River Forest	62	Riverdale	122	West Pullman	53
Barrington Hills	3	River Grove	63	Robbins	123	Riverdale	54
Bartlett	4	Riverside	64	Sauk Village	124	Hegewisch	55
Buffalo Grove	5	Rosemont	65	South Chicago Heights	125	Garfield Ridge	56
Deerfield	6	Schiller Park	66	South Holland	126	Archer Heights	57
Des Plaines	7	Stone Park	67	Steger	127	Brighton Park	58
East Dundee	8	Westchester	68	Thornton	128	Mckinley Park	59
Elgin	9	Western Springs	69	Tinley Park	129	Bridgeport	60
Elk Grove Village	10	Elmwood Park	70	Rogers Park	1	New City	61
Glencoe	11	Oak Park	71	West Ridge	2	West Elsdon	62
Glenview	12	Stickney	72	Uptown	3	Gage Park	63
Golf	13	Forest View	73	Lincoln Square	4	Clearing	64
Hanover Park	14	Burbank	74	North Center	5	West Lawn	65
Hoffman Estates	15	Alsip	75	Lake View	6	Chicago Lawn	66
Inverness	16	Bedford Park	76	Lincoln Park	7	West Englewood	67
Kenilworth	17	Blue Island	77	Near North Side	8	Englewood	68
Lincolnwood	18	Bridgeview	78	Edison Park	9	Greater Grand Crossing	69
Morton Grove	19	Chicago Ridge	79	Norwood Park	10	Ashburn	70
Mount Prospect	20	Crestwood	80	Jefferson Park	11	Auburn Gresham	71
Niles	21	Evergreen Park	81	Forest Glen	12	Beverly	72
Northbrook	22	Frankfort	82	North Park	13	Washington Heights	73
Northfield	23	Hickory Hills	83	Albany Park	14	Mount Greenwood	74
Palatine	24	Hometown	84	Portage Park	15	Morgan Park	75
Park Ridge	25	Justice	85	Irving Park	16	O'Hare	76
Prospect Heights	26	Lemont	86	Dunning	17	Edgewater	77
Rolling Meadows	27	Merrimette Park	87	Montclare	18		
Roselle	28	Oak Lawn	88	Belmont Cragin	19		
Schaumburg	29	Orland Hills	89	Hermosa	20		
South Barrington	30	Orland Park	90	Avondale	21		
Streamwood	31	Palos Heights	91	Logan Square	22		
Wheeling	32	Palos Hills	92	Humboldt Park	23		
Wilmette	33	Palos Park	93	West Town	24		
Winnetka	34	Summit	94	Austin	25		
Evanston	35	Willow Springs	95	West Garfield Park	26		
Skokie	36	Worth	96	East Garfield Park	27		
Bellwood	37	Burnham	97	Near West Side	28		
Bensenville	38	Calumet City	98	North Lawndale	29		
Berkeley	39	Calumet Park	99	South Lawndale	30		
Berwyn	40	Chicago Heights	100	Lower West Side	31		
Broadview	41	Country Club Hills	101	Loop	32		
Brookfield	42	Dixmoor	102	Near South Side	33		
Burr Ridge	43	Dolton	103	Armour Square	34		
Cicero	44	East Hazel Crest	104	Douglas	35		
Countryside	45	Flossmoor	105	Oakland	36		
Forest Park	46	Ford Heights	106	Fuller Park	37		
Franklin Park	47	Glenwood	107	Grand Boulevard	38		
Harwood Heights	48	Harvey	108	Kenwood	39		
Hillside	49	Hazel Crest	109	Washington Park	40		
Hinsdale	50	Homewood	110	Hyde Park	41		
Hodgkins	51	Lansing	111	Woodlawn	42		
Indian Head Park	52	Lynwood	112	South Shore	43		
La Grange	53	Markham	113	Chatham	44		
La Grange Park	54	Matteson	114	Avalon Park	45		
Lyons	55	Midlothian	115	South Chicago	46		
McCook	56	Oak Forest	116	Burnside	47		
Maywood	57	Olympia Fields	117	Calumet Heights	48		
Melrose Park	58	Park Forest	118	Roseland	49		
Norridge	59	Phoenix	119	Pullman	50		
Northlake	60	Posen	120	South Deering	51		

**Table 8. Reported Tuberculosis Cases and Rates (per 100,000 population) by Municipality,
North and West Districts, Suburban Cook County, 2007-2009**

City	NORTH						City	WEST						
	2007		2008		2009			2007		2008		2009		
	No.	Rate*	No.	Rate*	No.	Rate*		No.	Rate*	No.	Rate*	No.	Rate*	
Arlington Heights	3	3.9	4	5.2	2	2.6	Bellwood	1	4.9	1	5.2	0	0	
Barrington	0	0.0	1	1.3	0	0.0	Berkeley	0	0.0	0	0.0	2	38.2	
Barrington Hills	0	0.0	0	0.0	0	0.0	Berwyn	4	19.5	2	3.9	2	3.7	
Bartlett	0	0.0	1	1.3	0	0.0	Broadview	0	0.0	0	0.0	1	12.1	
Buffalo Grove	0	0.0	0	0.0	0	0.0	Brookfield	2	9.8	0	0.0	0	0	
Des Plaines	11	19.3	5	6.5	7	12.3	Burr Ridge	0	0.0	2	18.0	0	0	
Elgin	0	0.0	0	0.0	0	0.0	Cicero	6	29.3	4	4.9	2	2.3	
Elk Grove Village	4	11.5	0	0.0	1	2.9	Countryside	0	0.0	0	0.0	0	0	
Evanston	2	2.7	6	7.8	4	5.4	Elmwood Park	1	4.9	1	4.1	0	0	
Glencoe	0	0.0	0	0.0	0	0.0	Forest Park	5	24.4	0	0.0	2	12.8	
Glenview	4	9.3	2	2.6	2	4.6	Franklin Park	1	4.9	1	5.5	1	5.2	
Golf	0	0.0	0	0.0	0	0.0	Harwood Heights	1	4.9	2	24.6	0	0	
Hanover Park	1	2.6	0	0.0	1	2.6	Hillside	1	4.9	0	0.0	0	0	
Hoffman Estates	6	12.1	0	0.0	5	10.1	Hinsdale	0	0.0	0	0.0	0	0	
Inverness	0	0.0	0	0.0	0	0.0	Hodgkins	0	0.0	0	0.0	1	46.8	
Kenilworth	0	0.0	0	0.0	0	0.0	Indian Head Park	0	0.0	0	0.0	0	0	
Lincolnwood	2	16.2	1	1.3	3	24.3	La Grange	0	0.0	0	0.0	0	0	
Morton Grove	2	8.9	5	6.5	4	17.8	La Grange Park	0	0.0	1	7.9	0	0	
Mount Prospect	3	5.3	4	5.2	4	7.1	Lyons	1	4.9	0	0.0	0	0	
Niles	5	16.6	3	3.9	1	3.3	Maywood	5	24.4	0	0.0	2	7.4	
Norridge	0	0.0	1	1.3	0	0.0	Mccook	0	0.0	0	0.0	0	0	
Northbrook	0	0.0	2	2.6	2	36.2	Melrose Park	1	4.9	1	4.5	2	8.6	
Northfield	0	0.0	0	0.0	0	0.0	North Riverside	0	0.0	0	0.0	0	0	
Palatine	4	6.0	1	1.3	4	6.0	Northlake	3	14.6	2	31.6	0	0	
Park Ridge	0	0.0	0	0.0	1	2.6	Oak Park	1	4.9	3	6.0	1	1.9	
Prospect Heights	2	11.7	0	0.0	3	17.6	River Forest	0	0.0	0	0.0	0	0	
Rolling Meadows	2	8.1	0	0.0	0	0.0	River Grove	0	0.0	0	0.0	1	8.6	
Roselle	0	0.0	0	0.0	0	0.0	Riverside	1	4.9	0	0.0	0	0	
Schaumburg	7	9.3	3	3.9	2	2.7	Rosemont	0	0.0	0	0.0	0	0	
Skokie	11	17.4	6	7.8	8	12.6	Schiller Park	1	4.9	0	0.0	1	8.4	
South Barrington	0	0.0	0	0.0	0	0.0	Stone Park	0	0.0	1	20.6	0	0	
Streamwood	2	5.5	1	1.3	1	2.7	Westchester	3	14.6	1	6.3	1	5.9	
Wheeling	2	15.9	3	3.9	3	23.9	Western Springs	0	0.0	0	0.0	0	0	
Wilmette	1	3.6	2	2.6	1	3.6								
Winnetka	1	8.0	1	1.3	0	0.0								
Total	75	6.6	52	4.6	59	5.2	Total	38	6.3	22	3.7	19	3.2	

*Rates per 100,000 population per year.

Table 3. North District: In 2009, there were 59 reported cases of TB from North District municipalities (rate: 5.2 per 100,000 population). Ninety percent (90%) of municipalities with more than two reported TB cases were located in the North District. Skokie had the largest number of cases reported (n=8), followed by Des Plaines (n=7) and Hoffman Estates (n=5). Evanston, Morton Grove, Mount Prospect and Palatine had 4 TB cases each in 2009.

West District: There were 19 reported cases of TB in West District residents (rate: 3.2 per 100,000 population). The average rate in the West District was less than the county average of 4.0 per 100,000. High rates in some West District municipalities resulted from relatively small populations in those municipalities versus increases in reported TB cases.

**Table 9. Reported Tuberculosis Cases and Rates (per 100,000 population) by Municipality,
South and Southwest Districts, Suburban Cook County, 2008†**

City	SOUTH						City	SOUTHWEST						
	2007		2008		2009			2007		2008		2009		
	No.	Rate*	No.	Rate*	No.	Rate*		No.	Rate*	No.	Rate*	No.	Rate*	
Burnham	0	0.0	0	0.0	0	0.0	Alsip	2	10.5	2	10.6	1	5.1	
Calumet City	2	5.1	4	10.7	1	2.6	Bedford Park	0	0.0	0	0.0	0	0	
Chicago Heights	1	3.1	0	0.0	1	3.1	Blue Island	0	0.0	2	8.9	2	8.5	
Country Club Hills	2	12.4	1	6.0	0	0.0	Bridgeview	0	0.0	1	6.7	0	0	
Dixmoor	1	25.4	0	0.0	0	0.0	Burbank	2	7.2	3	10.8	1	3.6	
Dolton	0	0.0	2	8.3	2	7.8	Calumet Park	0	0.0	0	0.0	1	11.8	
East Hazel Crest	0	0.0	0	0.0	0	0.0	Chicago Ridge	0	0.0	0	0.0	0	0	
Flossmoor	0	0.0	1	10.6	0	0.0	Crestwood	0	0.0	0	0.0	0	0	
Ford Heights	0	0.0	0	0.0	0	0.0	Evergreen Park	0	0.0	0	0.0	0	0	
Glenwood	1	11.1	0	0.0	0	0.0	Forest View	0	0.0	0	0.0	0	0	
Harvey	2	6.7	4	14.0	1	3.3	Hickory Hills	0	0.0	0	0.0	0	0	
Hazel Crest	0	0.0	0	0.0	1	6.7	Hometown	0	0.0	0	0.0	0	0	
Homewood	0	0.0	0	0.0	0	0.0	Justice	0	0.0	0	0.0	0	0	
Lansing	0	0.0	0	0.0	2	7.1	Lemont	0	0.0	0	0.0	0	0	
Lynwood	0	0.0	0	0.0	0	0.0	Merrionette Park	0	0.0	0	0.0	0	0	
Markham	0	0.0	0	0.0	1	7.9	Oak Lawn	2	3.7	1	1.9	3	5.4	
Matteson	0	0.0	0	0.0	0	0.0	Orland Hills	0	0.0	0	0.0	0	0	
Midlothian	1	7.0	0	0.0	1	7.0	Orland Park	3	5.4	1	1.8	0	0	
Oak Forest	0	0.0	0	0.0	0	0.0	Palos Heights	0	0.0	0	0.0	0	0	
Olympia Fields	0	0.0	0	0.0	0	0.0	Palos Hills	0	0.0	0	0.0	0	0	
Park Forest	0	0.0	0	0.0	0	0.0	Palos Park	0	0.0	0	0.0	0	0	
Phoenix	0	0.0	0	0.0	0	0.0	Stickney	0	0.0	0	0.0	0	0	
Posen	0	0.0	1	20.2	0	0.0	Summit	0	0.0	1	9.7	0	0	
Richton Park	2	15.9	0	0.0	0	0.0	Willow Springs	0	0.0	0	0.0	1	19.5	
Riverdale	1	9.4	2	19.7	0	0.0	Worth	0	0.0	0	0.0	0	0	
Robbins	0	0.0	0	0.0	0	0.0								
Sauk Village	0	0.0	0	0.0	0	0.0								
Heights	0	0.0	0	0.0	0	0.0								
South Holland	0	0.0	0	0.0	1	4.5								
Steger	0	0.0	0	0.0	1	10.3								
Thornton	0	0.0	0	0.0	0	0.0								
Tinley Park	0	0.0	0	0.0	1	2.0								
Total	13	2.7	15	3.1	13	2.7	Total	9	2.4	11	3.0	9	2.4	

*Rates per 100,000 population per year.

Table 4. South District: There were 13 reported cases of TB in the South District residents (rate: 2.7 per 100,000 population). The rate in the South District was below the average rate of 4.0 per 100,000 population in suburban Cook County in 2009.

Southwest District: There were 9 reported cases of TB reported in Southwest District residents (rate: 2.4 per 100,000 population). The rate in the Southwest District was below the average rate of 4.0 per 100,000 population in suburban Cook County. The municipality with the largest number of reported TB cases in 2009 was Oak Lawn (n=3, rate 5.4 per 100,000).

TECHNICAL NOTES

Surveillance Methodology

Healthcare providers and laboratories in suburban Cook County are required to report the following results within 24 hours: (1) sputum or tissue smears positive for acid-fast bacilli (AFBs); (2) cultures positive for *Mycobacterium tuberculosis*; (3) mycobacterial drug susceptibility results; (4) any other tests positive for *Mycobacterium tuberculosis*. In addition, confirmed TB cases must be reported to CCDPH within 7 days.

TB case reports are entered into I-NEDSS and provide the basis for the information presented in this report. This report includes all cases of tuberculosis reported during the year in which the case was confirmed. Confirmed TB cases who may have moved into suburban Cook County from another jurisdiction are not reflected in the data presented herein; such cases are counted in the jurisdiction that reported the case. Likewise, confirmed TB cases reported in suburban Cook County who may have moved out of suburban Cook County are included in the data presented herein.

Reported TB Case Rates

Suburban Cook County, Chicago and Illinois TB rates between 1993-1999 were calculated using 1990 census data. Suburban Cook County, Chicago and Illinois TB rates between 2000-2009 were calculated using 2000 census data. National TB rates were calculated using national intercensal estimates.