

# **Tuberculosis**

#### What is it?

Tuberculosis (TB) is an infection caused by the bacterium *Mycobacterium tuberculosis*, which spreads from person to person when a contagious individual sneezes, coughs, or speaks and the TB germs are inhaled by others. Tuberculosis usually infects the lungs but can infect any part of the body, including the kidney, brain or spine. Close contacts of TB cases, such as household members, coworkers or others who spend considerable time together, can become infected.

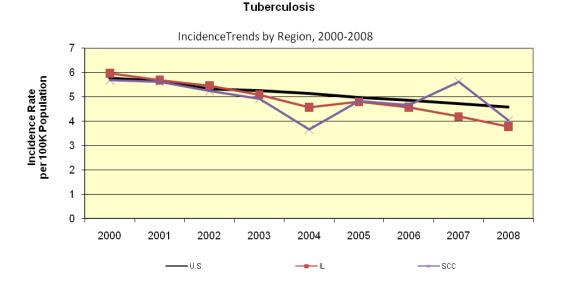
#### Why is it important?

Approximately 2 billion persons worldwide may be infected with the non-contagious form of TB, latent TB infection<sup>ii</sup>; of these, about 10% will go on to develop active TB, which is contagious and potentially deadly.<sup>iii</sup> If untreated, a single TB case may infect as many as 10 other people.<sup>ii</sup> TB is also an indicator disease in persons with HIV, and persons with HIV and latent TB infection are much more likely to develop active TB.<sup>iii</sup>

#### 2000-2008

Overall, TB rates in the U.S. declined at a rate of about 0.2 cases per 100,000 population per year between 2000 and 2008. The 2008 TB rate in the U.S. was 4.6 cases per 100,000 population. Though there has been some fluctuation, overall, the trend in Suburban Cook County (SCC) was downward; the 2008 TB rate in SCC was 4.6 cases per 100,000 population, somewhat lower than the 2008 TB rate in the U.S.

Figure 1

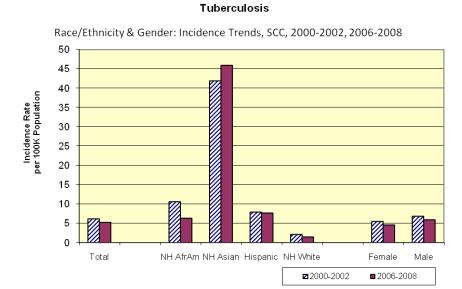


# **2000-2002 VS. 2006-2008**By Race and Gender

Overall, the TB rate decreased 13% from 6.1 per 100,000 between 2000-2002 to 5.3 per 100,000 population between 2006-2008.

Asian/Pacific Islanders in SCC were disproportionately affected by TB relative to other race/ethnicity groups. The rate in Asian/Pacific islanders was 46.0 per 100,000 population, 6 times higher than the rate in Hispanics (7.7 per 100,000.), 7 times higher than the rate in African Americans (6.4 per 100,000 population) and 31 times higher than the rate in Whites (1.5 per 100,000).

Figure 2

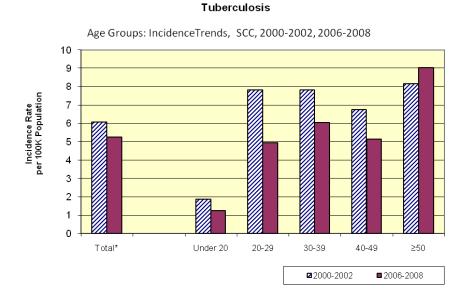


# 2000-2002 vs. 2006-2008

#### By Age Groups

There was a decrease in TB rates from 2000-2002 and 2006-2008 in all age groups except for persons aged 50 and over. Between 2006-2008, the TB rate in those aged 50 years and over was 9.0 per 100,000 population, which was appoximately 10% higher than the TB rate between 2000-2002.

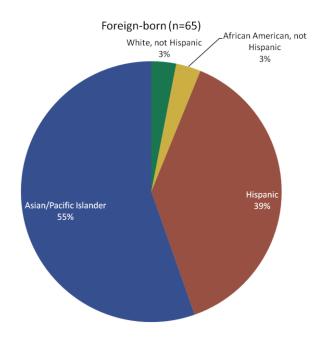
Figure 3



#### Foreign born

There are important race/ethnicity differences in the distribution of cases by birthplace. Among those born overseas, 55% of TB cases were among Asian/Pacific Islanders and 39% were among Hispanics in 2010.

Figure 4



#### **Domestic**

Among cases born in the U.S., only 4% were Asian/Pacific Islander, with much larger proportions of White and African American (43% and 32%, respectively) relative to those born overseas (3% each, White and African American).

Figure 5

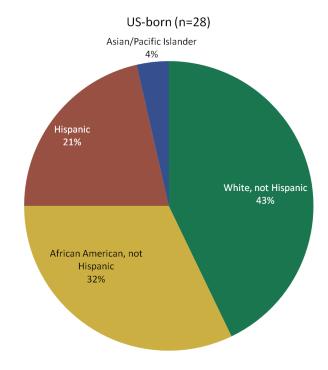


Table 1

Tuberculosis Incidence by Region 2000-2008

	2000	90	2001	9	2002	12	2003	33	2004	4(	2005	35	2006	90	2007	77	2008	18
	_	rate	_	rate	_	rate	_	rate	_	rate	_	rate	_	rate	_	rate	_	rate
U.S.	16,310	5.8	15,945	5.6	15,056	5.3	14,836	5.3	14,500	5.1	14,067	9.0	13,727	4.9	13,288	4.7	12,904	4.6
II.	743	0.9	707	5.7	089	5.5	633	5.1	269	4.6	296	4.8	999	4.6	521	4.2	469	3.8
၁၁Տ	141	5.7	139	5.6	130	5.2	122	4.9	ъ	3.7	128	4.8	116	4.7	139	9.9	100	4.0
Rates based on 2000 Census Population for SCC	00 Census	Populatio	In for SCC														•	

## Table 2

## **Tuberculosis**

Incidence Trends, SCC By Race/Ethnicity, Gender, & Age Groups 2000-2002, 2006-2008

CCDPH 2000-2002 2006-2008

	2000	2002	2000	2000
	n	rate	n	rate
Total	410	6.1	356	5.3
Race				
NH AfrAm	97	10.5	59	6.4
NH Asian	146	42.0	160	46.0
Hispanic	71	7.8	70	7.7
NH White	93	2.0	67	1.5
Gender				
Female	189	5.4	161	4.6
Male	221	6.8	195	6.0
Age Groups	,		,	
Under 20	36	1.9	24	1.3
20-29	65	7.8	41	4.9
30-39	79	7.8	61	6.0
40-49	71	6.7	54	5.1
≥50	159	8.2	176	9.0

<sup>\*</sup>Unspecified estimate (N<5)

Rates based on 2000 Census Population for SCC

<sup>~</sup>Rate not calculated(N<5)

<sup>&</sup>lt;sup>i</sup> CDC. Basic TB Facts. Available at: <a href="http://www.cdc.gov/tb/topic/basics/default.htm">http://www.cdc.gov/tb/topic/basics/default.htm</a> (last accessed 3/30/2011).

<sup>&</sup>lt;sup>ii</sup> WHO. TB fact sheet #104. Available at: <a href="http://www.who.int/mediacentre/factsheets/fs104/en/index.html">http://www.who.int/mediacentre/factsheets/fs104/en/index.html</a> (last accessed 3/30/2011).

iii CDC. TB Fact Sheets – latent TB Infections vs. TB Disease. Avaiable at; <a href="http://www.cdc.gov/tb/publications/factsheets/general/LTBIandActiveTB.htm">http://www.cdc.gov/tb/publications/factsheets/general/LTBIandActiveTB.htm</a> (last accessed 3/30/2011).