



Profile of Tuberculosis in San Francisco 2002

TB Cases:

In 2002, 146 (18.4 per 100,000) new cases of active tuberculosis (TB) disease were diagnosed in San Francisco. This represents a 19.9% decrease from 2001 and a 59% decrease from 1993 when TB incidence in San Francisco peaked due to the AIDS epidemic, homelessness, and increased immigration from countries with high rates of TB. Despite recent declines, the rate of TB in San Francisco is still 3 times the 2001 national average of 5.6 per 100,000 and far from the Healthy People 2010 goal of 1 case per 100,000.

Demographic Characteristics (see Table 1):

Age Groups: The proportion of cases reported among 25-44 year olds increased significantly, with over one-third of all cases diagnosed in this age group in 2002. Approximately one-half of all cases among black, non-Hispanics, Asian/Pacific Islanders, and homeless persons were diagnosed in this age group. Also, over 40% of all U.S.-born cases, and over 72% of HIV-infected cases were diagnosed in persons 25-44 years of age. Declines in TB incidence were seen in all other age groups. There were 3 cases of pediatric TB this year. Two cases were U.S.-born and all were due to transmission of disease from adults.

Race and Ethnicity: In 2002, the highest rates of TB occurred in the Asian/Pacific Islander (30.2 per 100,000) and black, non-Hispanic (31.6 per 100,000) populations in San Francisco. While the overall rate of disease continued to decrease among the Asian/Pacific Islander population, the disease rate remained constant in blacks for the second year in a row. This may partly be due to the increase in the number of homeless and HIV-infected cases among this racial group in 2002. Eighty percent of all cases in black, non-Hispanics were homeless, 60% were HIV-infected, and 52% were both homeless and HIV-infected.

Country of birth: While the number of cases reported among the U.S.-born population in San Francisco has remained stable for the past 2 years, the proportion of San Francisco's TB cases among foreign-born residents declined 27% in 2002. Declines were observed in the number of cases diagnosed in

2002 Highlights:

Tuberculosis among the Homeless

For the second year in a row, TB among San Francisco's homeless population has contributed significantly to the number of active TB cases identified in the county. Over 50% of all homeless cases occurred among black, non-Hispanics and 32% were among white, non-Hispanics. Ninety-five percent of cases were diagnosed in individuals 25-64 years of age, 76% of cases were men, and 87% of cases were U.S.-born. A significantly higher proportion of homeless cases reported excess alcohol use (47%), non-injection drug use (42%), injection drug use (40%), and were co-infected with HIV (47%) than the general population of TB cases in San Francisco. DNA fingerprinting of *Mycobacterium tuberculosis* isolates revealed that an outbreak accounting for 25-30% of all homeless cases in 2002 were due to a single strain. The large proportion of homeless cases co-infected with HIV, combined with ongoing outbreaks and transmission of disease in homeless shelters during 2001 and 2002 highlights the need for continued program focus on this population.

Tuberculosis among the Foreign-born

Since 2000, the proportion of TB cases reported among the foreign-born in San Francisco has declined each year. In 2000, over 80% of all cases were foreign-born; only 68% of cases in 2002 were reported among this population. The largest decline in the number of cases occurred among persons from China and the Philippines (38.7% and 34.4% decline from 2001, respectively). The overall decline in the number of foreign-born cases in 2002 may be partly attributed to the success of San Francisco's Targeted Testing program, aimed at identifying and treating foreign-born residents for latent TB infection.

individuals from China and the Philippines (see "2002 Highlights").

Social Factors (see Table 1):

Homelessness: San Francisco's homeless problem continues to fuel high TB rates among this population. In 2002, the number of cases increased by 65%, with one in every 4 cases (26%) being homeless (see "2002 Highlights").

Substance abuse: Although declines in the incidence of substance abuse were observed among San Francisco's TB cases last year, the incidence of alcohol, non-injection drug, and injection drug use more than doubled this year. In 2002, 15% of cases reported excess alcohol use, 12.2% reported non-injection drug use, and 11% reported injection drug use. Over 80% of all cases reporting these factors were also homeless.

Medical Factors (see Table 2):

AIDS: Approximately 20% of reported TB cases were co-infected with both TB and HIV. Although the overall number of cases with AIDS had declined annually since its peak in 1991, in 2002, the number of TB cases reported with AIDS more than doubled from the previous year, increasing from 13 cases in 2001 to 29 cases in 2002. This increase in AIDS cases appears to be associated with the increase in homeless cases this year (see "2002 Highlights").

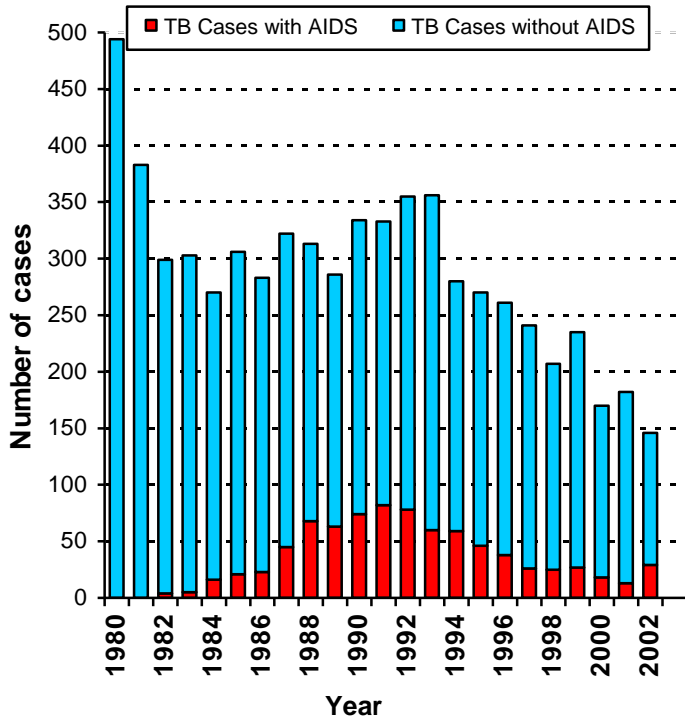
Drug Resistance (see Table 2):

Fifteen percent of all culture-positive TB cases (n=120) were resistant to a least one drug. Sixty-one percent of resistant isolates were resistant to isoniazid (INH) and 22.2% were resistant to rifampin (RIF). There were 4 cases of multi-drug resistant TB (resistance to INH and RIF), however none of these cases were due to acquired drug-resistance.

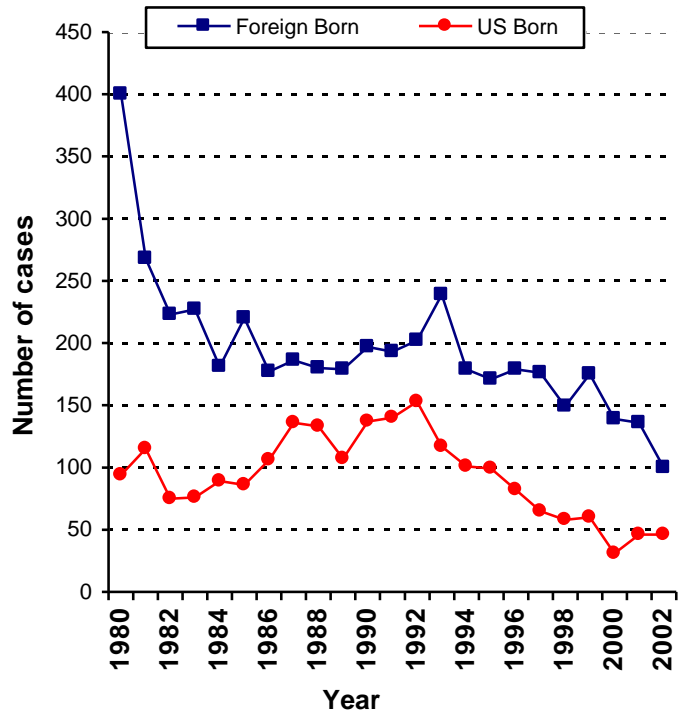
Program Indicators:

San Francisco TB control provides state of the art care for all patients. In 2002, the program continued to achieve high rates of treatment completion among active TB cases and had no cases of acquired drug resistance for the 5th year in a row.

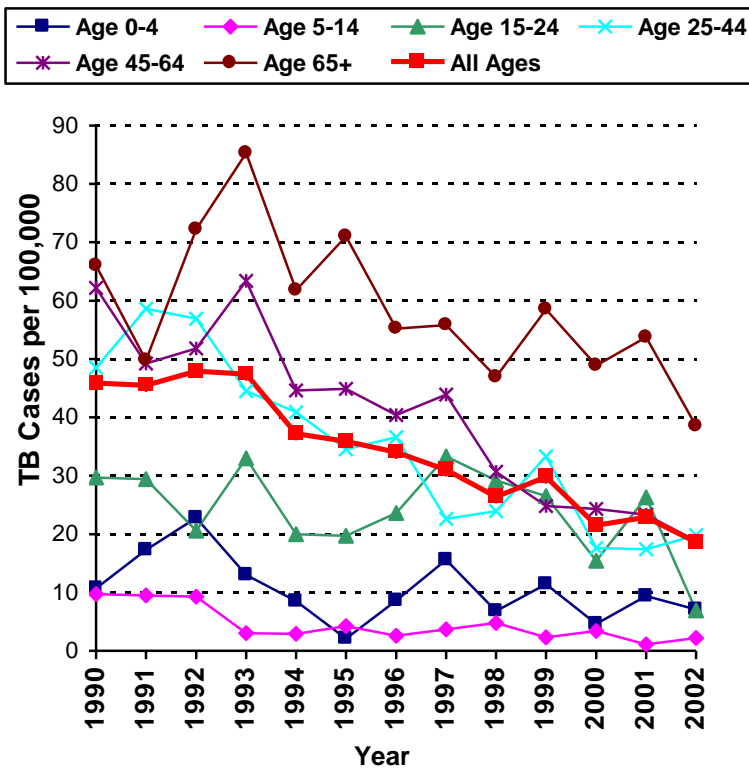
TB Cases in San Francisco by AIDS Status, 1980-2002



TB Cases in San Francisco by Place of Birth, 1980-2002



Rates of TB in San Francisco by Age Group, 1990-2002



Rates of TB in San Francisco by Race and Ethnicity, 1990-2002

