Tuberculosis in New York City

1979-1984

SPECIAL SUPPLEMENT

Tuberculosis in 1984 in New York City continues to demonstrate some unusual trends that have been present since 1981. However, the overall rate of tuberculosis is unchanged from 1983 and stands at 23.1 cases per 100,000 population. The case rate for persons living in 57 cities with populations of 250,000 or more was 19.3/100,000 in 1984--more than twice the national average of 9.4 cases per 100,000 population.

In New York City, there was a decline in TB incidence in Whites, from 1979 to 1984, from 13 to 9 cases per 100,000 population. The incidence of tuberculosis among Blacks increased from 40 cases per 100,000 population in 1979 to 52 cases per 100,000 population in 1984. For Hispanics over the same period of time, the case rate increased from 18 to 23 per 100,000 population (Figure 1). The increased incidence of TB among Blacks and Hispanics from '79 to '84 is almost entirely in males (Figure 2). There is no consistent increase among Black and Hispanic females (Figure 3).

In all males 15-54, there has been a 33% increase in incidence over the past six years. Those 25-44 are mostly responsible for the change. Over the same period, tuberculosis incidence has declined in males 55 years and above, to a low of 41 cases per 100,000 population (Figure 4). Among females, no age group shows any consistent changes in incidence over time (Figure 5).

Tuberculosis incidence among Black and Hispanic men 25-44 years of age has almost doubled from 1979 to 1984. For Black men 25-44 years of age, case rates increased from 85 to 159 per 100,000 and for Hispanic men 25-44 years of age, case rates increased from 36 to 66 per 100,000 (Figure 6).

The health districts where the increased incidence in males has occurred are listed in Table 1. Those districts are starred where the percent changes between '80-'81 and '83-'84 exceeded 30% and the incidence in '80-'81 was greater than 20 cases per 100,000 population.

During the period of '81-'84, when these increases in TB occurred, there has been a growing epidemic of immune deficiency disorders, particularly AIDS. Traditionally, compromised immunity among those infected with TB has resulted in disease. It is plausible to suggest that epidemic immune deficiency may be associated with the increased TB incidence. Evidence for a relationship between these two diseases is based on the observation that in an excess of 100 cases from 1981 to 1984, a diagnosis of M.

TB either preceeded or followed the diagnosis of Acquired Immune Deficiency. As the number of cases of AIDS has increased over time, there has been a parallel increase in the number AIDS associated TB cases (Figure 7).

The population that is currently experiencing an increase in TB incidence is composed predominantly of Black and Hispanic males 25 to 44 years of age. This group is demographically similar to those intravenous drug abusers who are at risk for AIDS.

In an effort to further elucidate this relationship, the TB, AIDS and Methadone Maintenance registries were matched. The results suggest that a significant portion of the increase in tuberculosis from 1981 to 1984 may be related to the current epidemic of immune deficiency disorders among those at highest risk (Figure 8).

The New York City Health Department, Bureau of Tuberculosis Control and AIDS Division will over the next months investigate this potential relationship.

FIGURE 1:

TUBERCULOSIS INCIDENCE per 100,000, NEW YORK CITY, 1979–1984

By Race

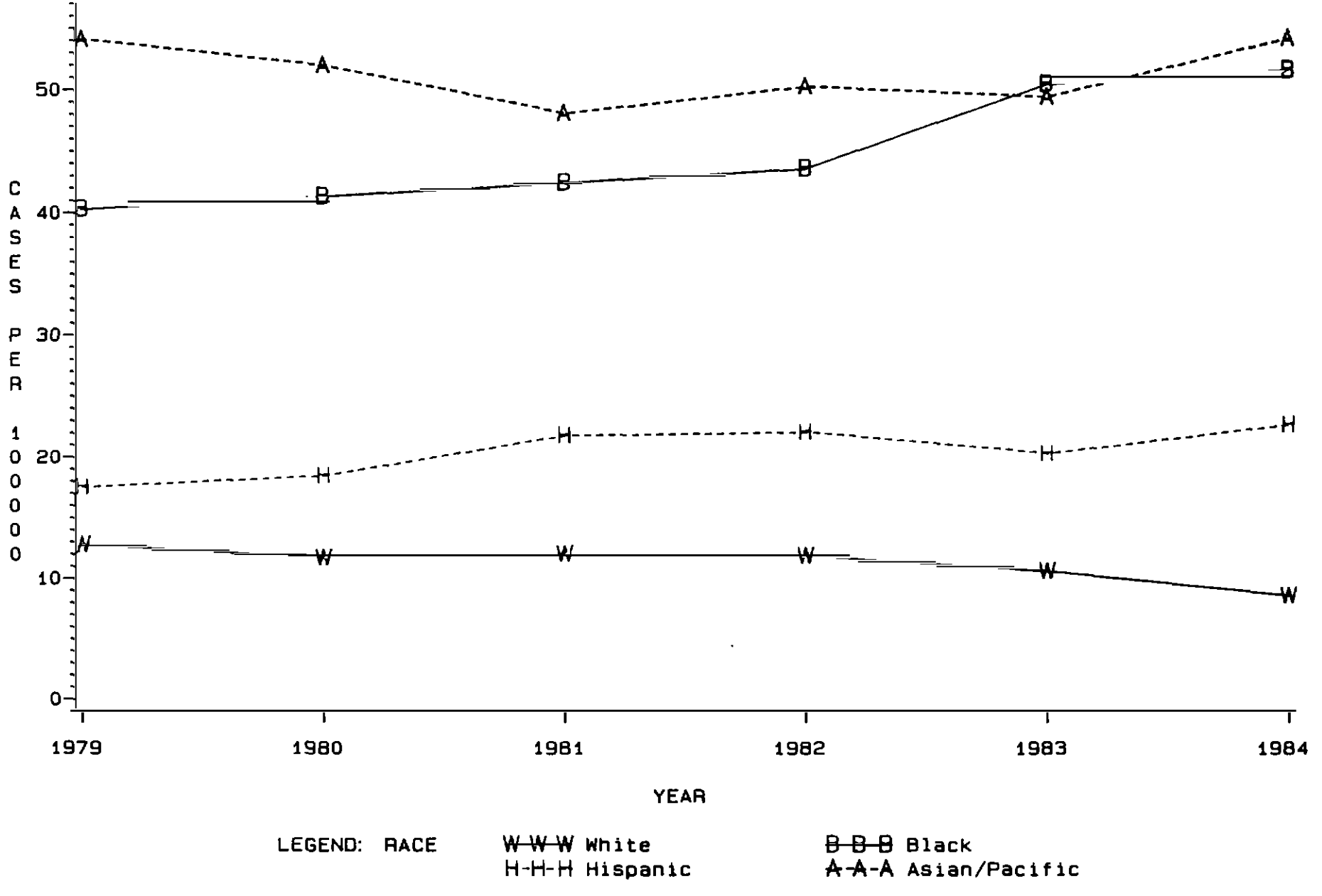


FIGURE 2:

TUBERCULOSIS INCIDENCE per 100,000, NEW YORK CITY, 1979–1984

Males Only, by Race

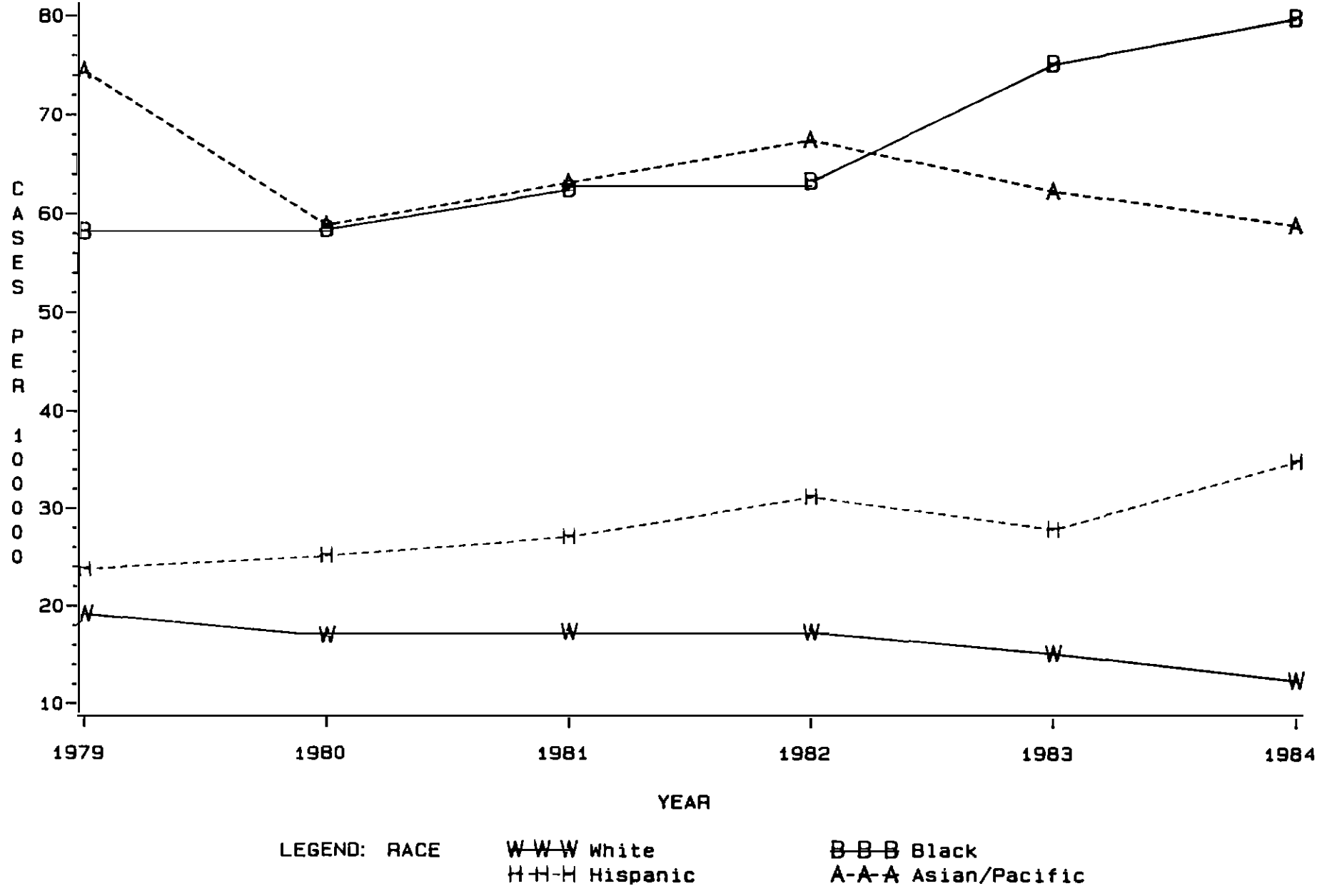


FIGURE 3:

TUBERCULOSIS INCIDENCE per 100,000, NEW YORK CITY, 1979–1984

Females Only, by Race

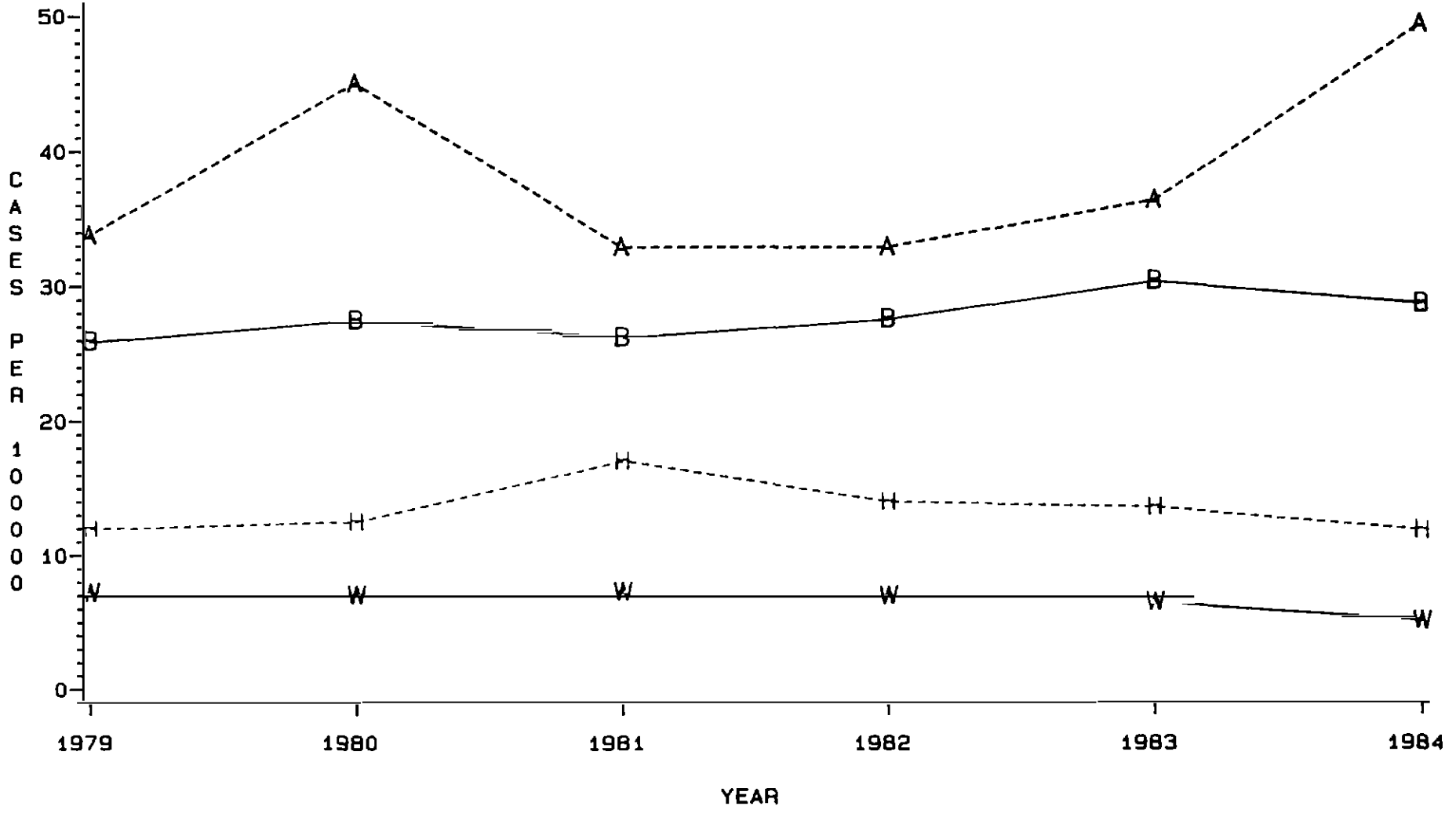


FIGURE 4:

TUBERCULOSIS INCIDENCE per 100,000, NEW YORK CITY, 1979–1984

Males only, by age

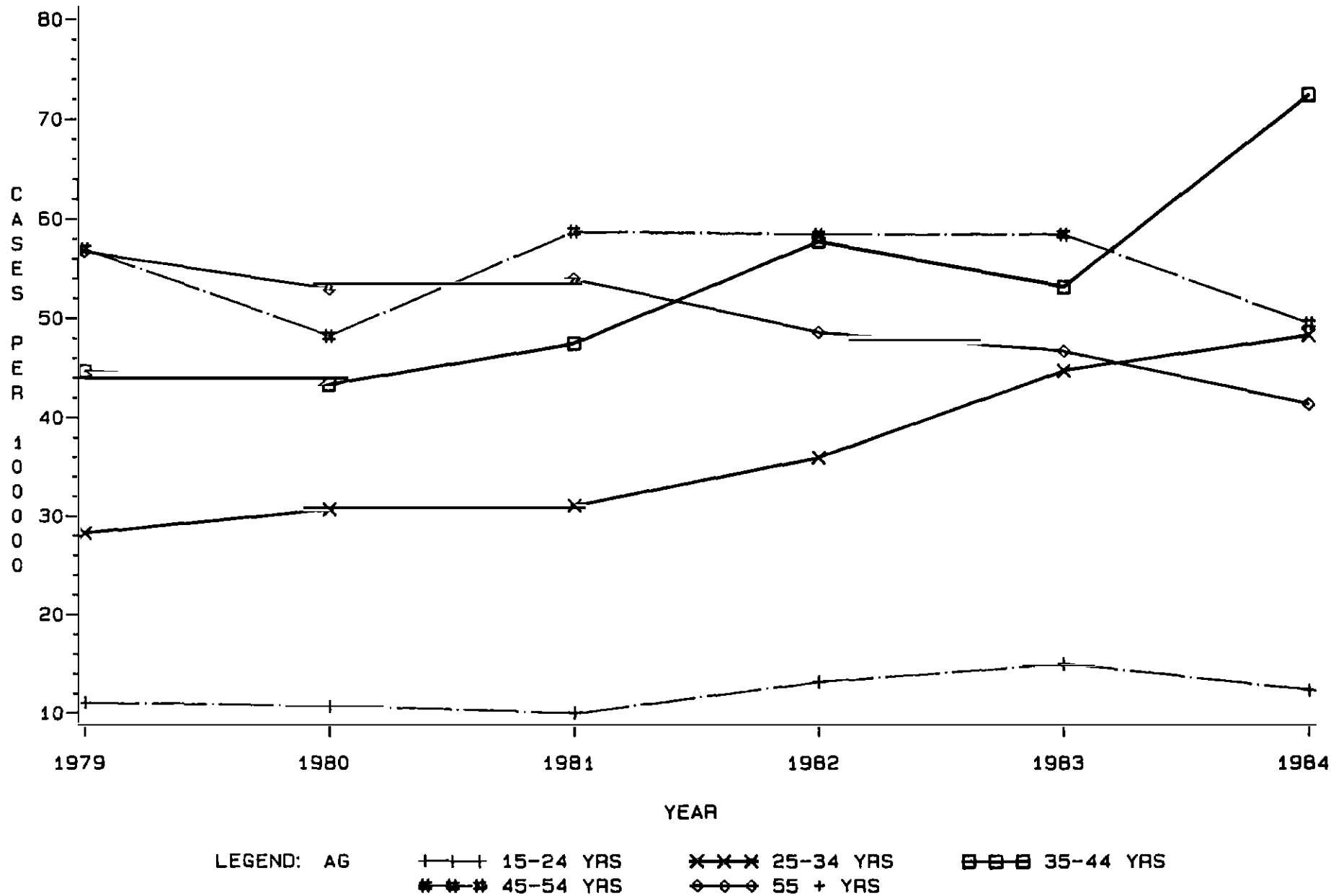


FIGURE 5:

TUBERCULOSIS INCIDENCE per 100,000, NEW YORK CITY, 1979–1984

Females only, by age

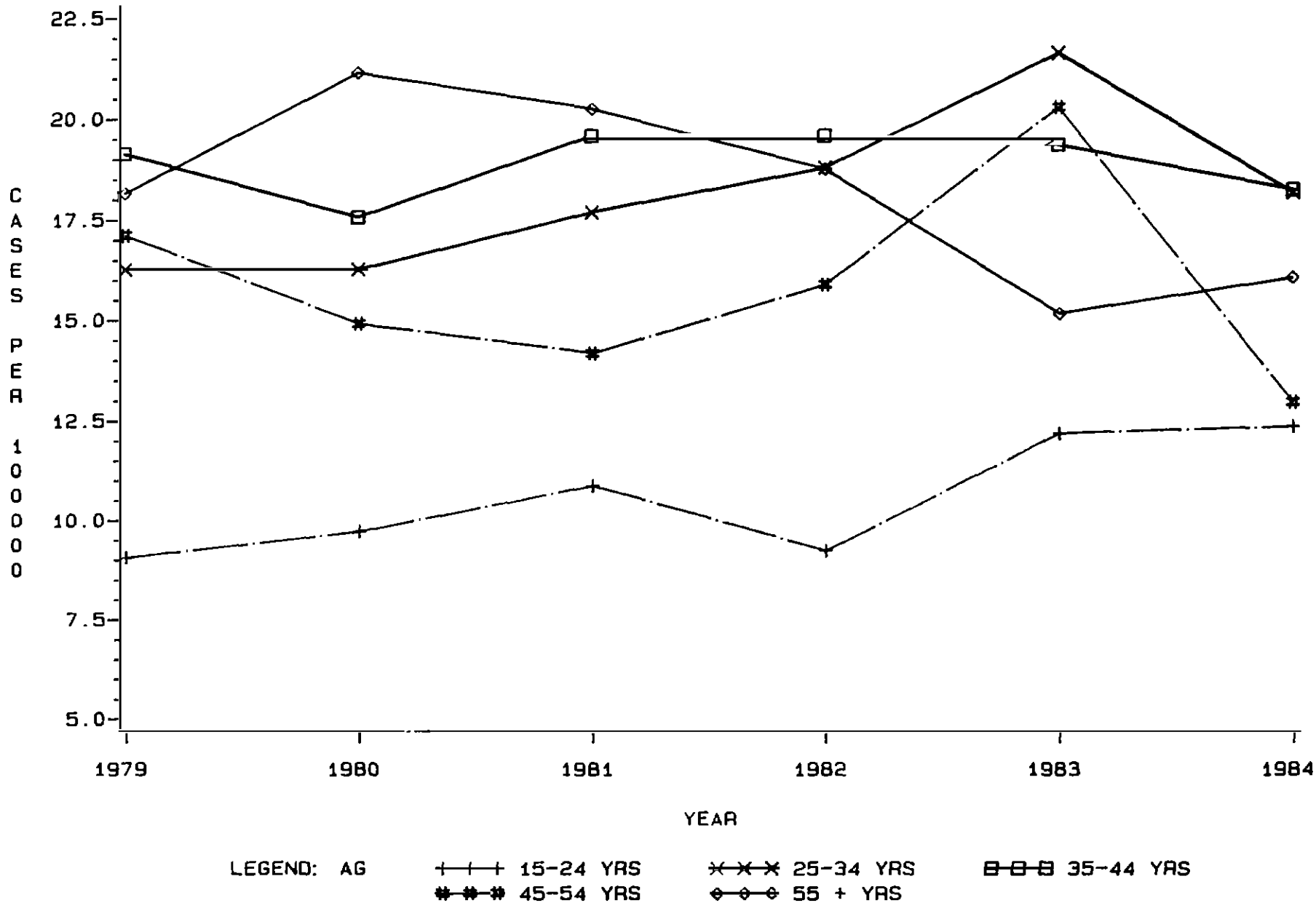


FIGURE 6:

TUBERCULOSIS INCIDENCE per 100,000, NEW YORK CITY, 1979–1984

Males ages 25–44 only, by Race

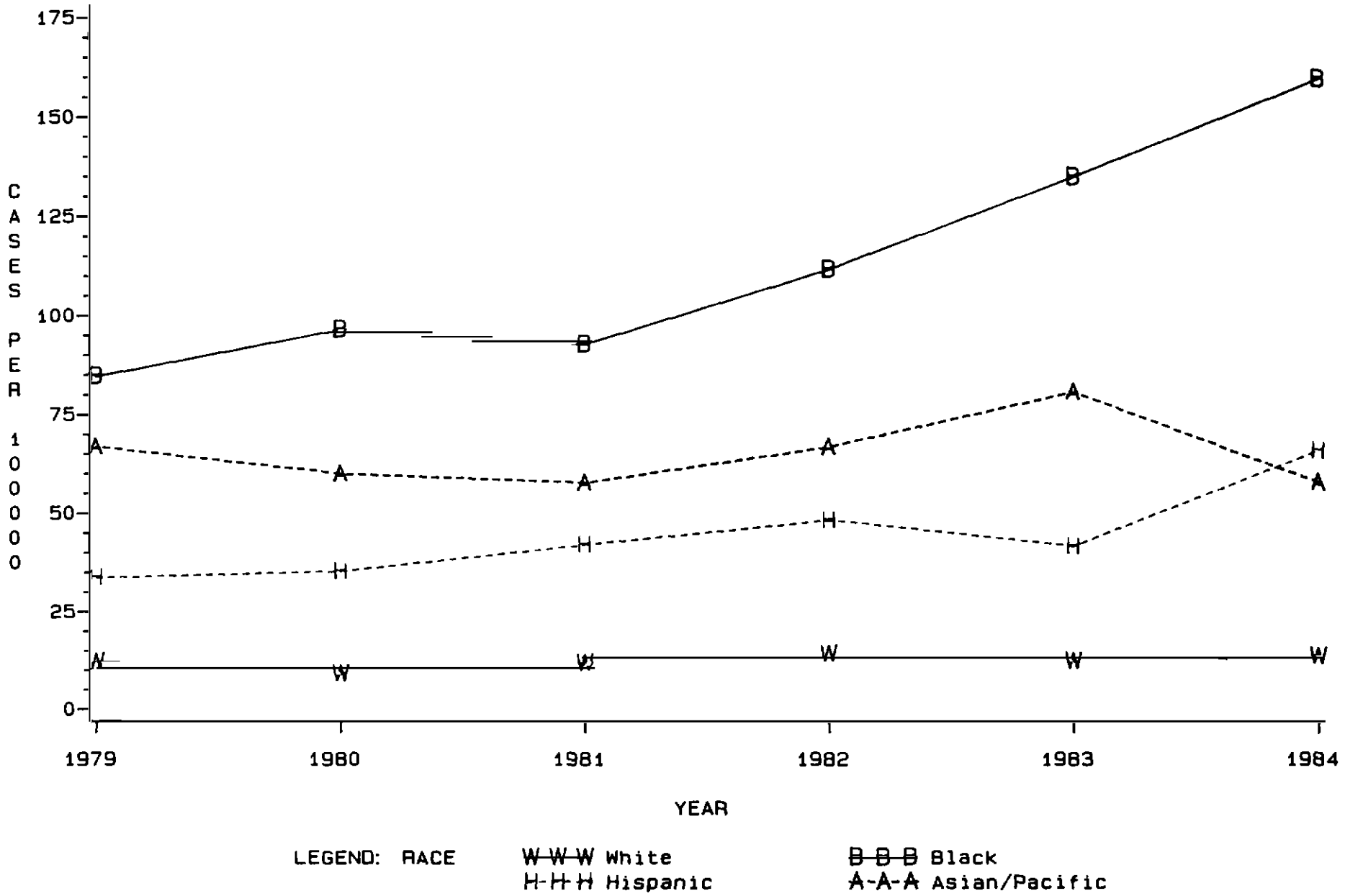


FIGURE 7:

AIDS INCIDENCE IN NEW YORK CITY, 1980–1984

Males, age 15–54 only, by quarter year of diagnosis

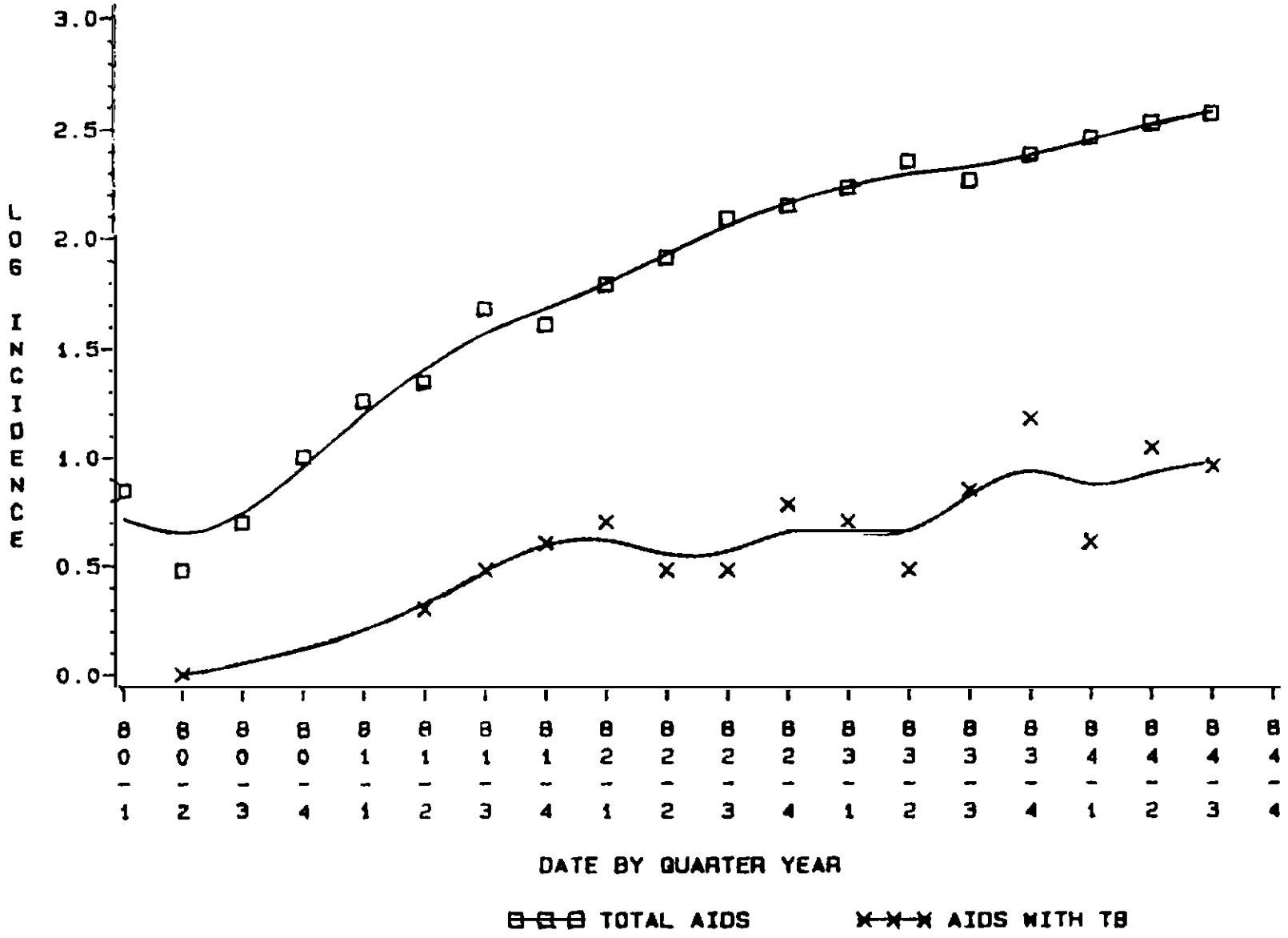
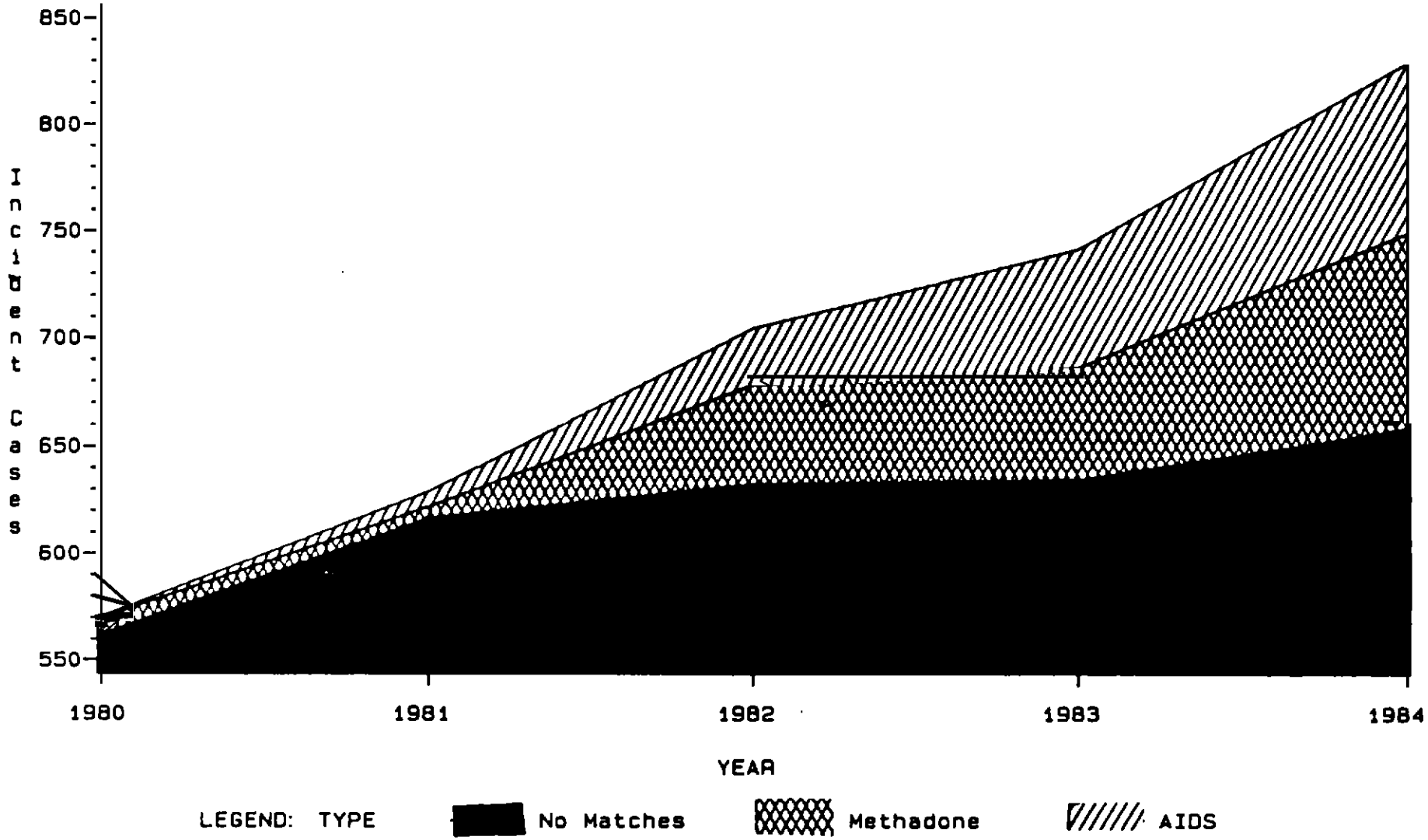


FIGURE 8:

TUBERCULOSIS CASES IN NEW YORK CITY, 1980–1984

Males aged 15–54 only.
Matches to AIDS or Methadone Maintenance Registries



Methadone registry matches for 1984 are annualized, based on 4 months.

TABLE 1:

TUBERCULOSIS INCIDENCE IN NEW YORK CITY MALES 15-54,

BY HEALTH DISTRICT, 1980-1981 VS. 1983-1984 RATES PER 100,000

Borough/District	Annualized Incidence Rate 1980-1981	1983-1984	Percent Change
MANHATTAN			
Central Harlem	139	197	42
East Harlem	35	85	143
Kips Bay--Yorkville	13	10	-28
Lower East Side	116	125	8
Lower West Side	40	67	68
Riverside	40	51	27
Washington Heights	48	42	-13
BRONX			
Fordham--Riverdale	24	33	37
Morrisania	55	73	34
Mott Haven	57	69	21
Pelham Bay	13	18	29
Tremont	26	71	177
Westchester	13	18	44
BROOKLYN			
Bay Ridge	7	11	75
Bedford	81	95	18
Brownsville	33	50	50
Bushwick	62	63	2
Flatbush	18	33	82
Fort Greene	77	78	3
Gravesend	17	10	-39
Red Hook--Gowanus	37	33	-12
Sunset Park	14	19	36
Williamsburg--Greenpoint	34	58	71
QUEENS			
Astoria--Long Island City	23	25	10
Corona	25	48	92
Flushing	8	11	32
Jamaica East	30	30	4
Jamaica West	12	18	48
Maspeth--Forest Hills	7	5	-30
STATEN ISLAND			
Total	10	4	-63