

A photograph of the Golden Gate Bridge in San Francisco, California. The bridge's iconic red-orange towers and suspension cables are prominent against a clear blue sky. The bridge spans across the water, with hills visible in the background. The image is framed by a black border.

*TB Control in
San Francisco
2003*

San Francisco TB Control: Goals

- Find and treat all cases to completion
- Stop transmission
- Prevent TB in those at greatest risk of disease (especially contacts)

Today's Report: Why?

- Regular program evaluation is necessary for tailoring prevention and control efforts.
- To share the progress made within the specific goals and objectives of the current grant cycle.
- To point out areas of program strength and opportunities for improvement.

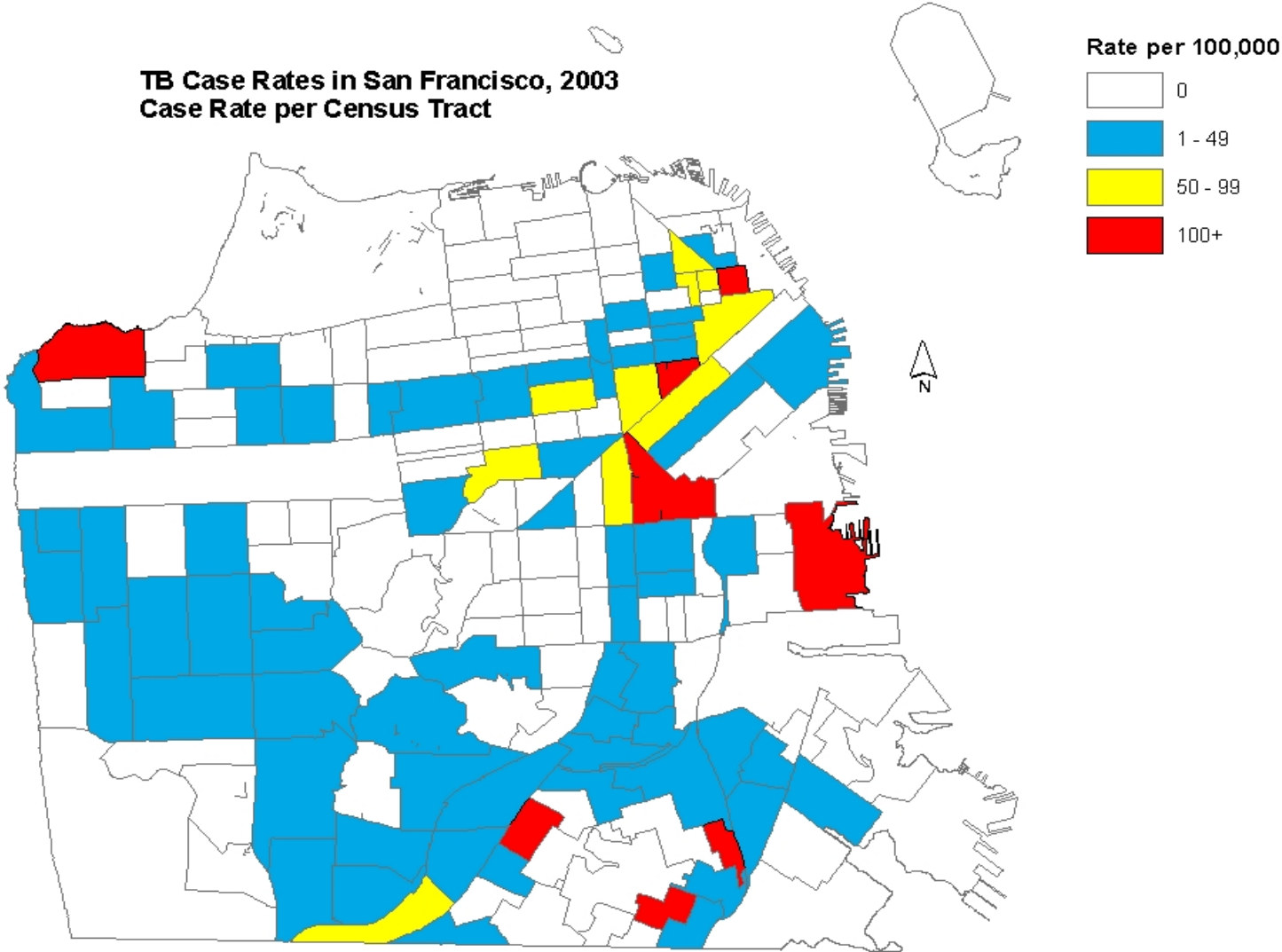
City & County of San Francisco: Statistics

- Population: ~751,682 (2003 estimate)
- Size: 49 square miles
- 37% foreign born (~50-60% LTBI)
- 8,000-13,000 homeless (15.9% HIV+, 32% LTBI)
- 18,672 injection drug users (22% HIV+)
- ~55,000 jail bookings each year

TB in San Francisco: 2003

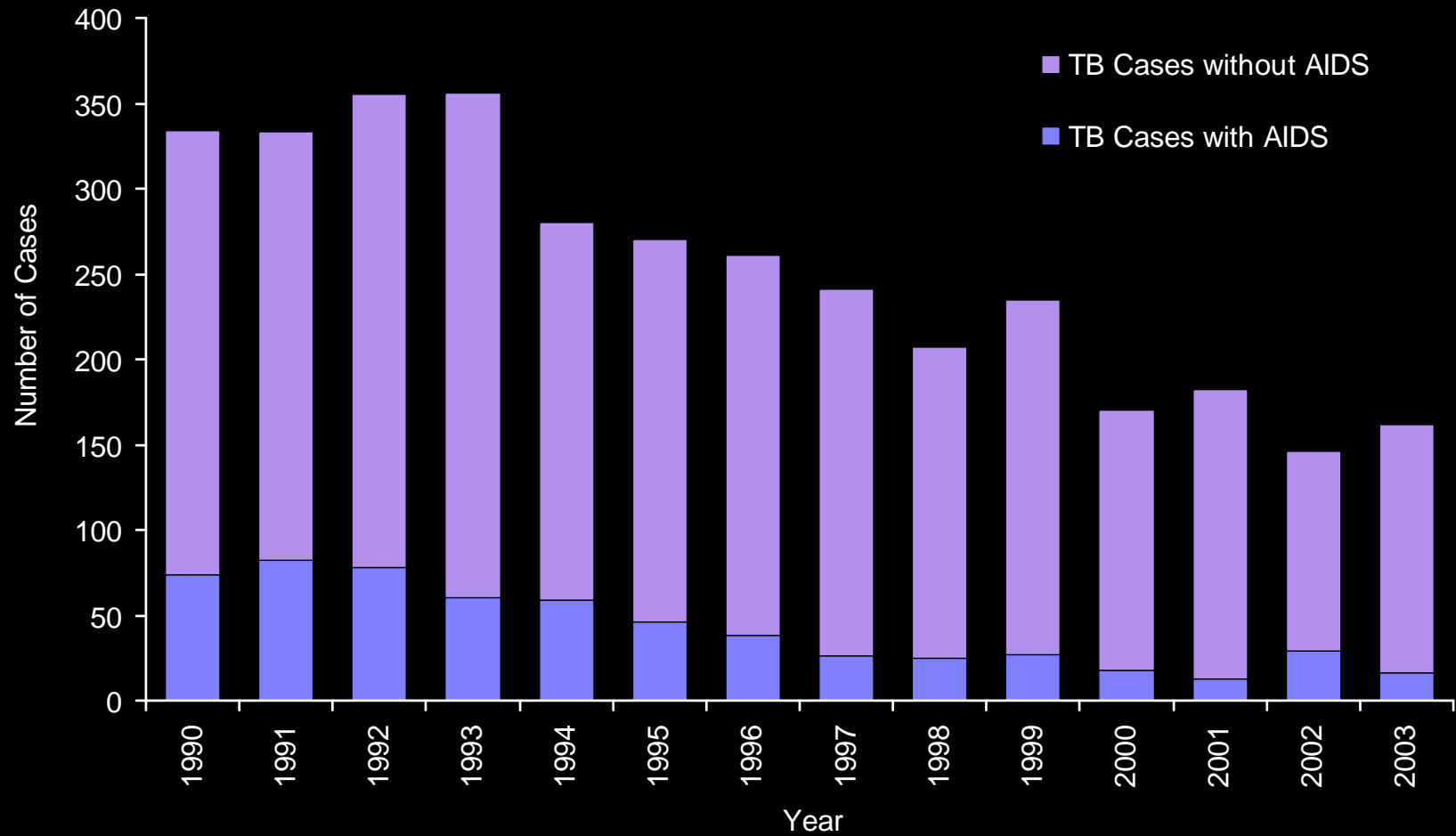
- 162 new cases reported in 2003 (11% increase from 2002 – 146 cases)
- Rate of 20.4/100,000 (~4 times the U.S. rate of 5.2)
- SF has the highest TB rate of any county in CA and any metro area in the U.S.
- Cases are concentrated in defined city locations with rates as high the developing world (>100/100,000)

TB Case Rates in San Francisco, 2003 Case Rate per Census Tract

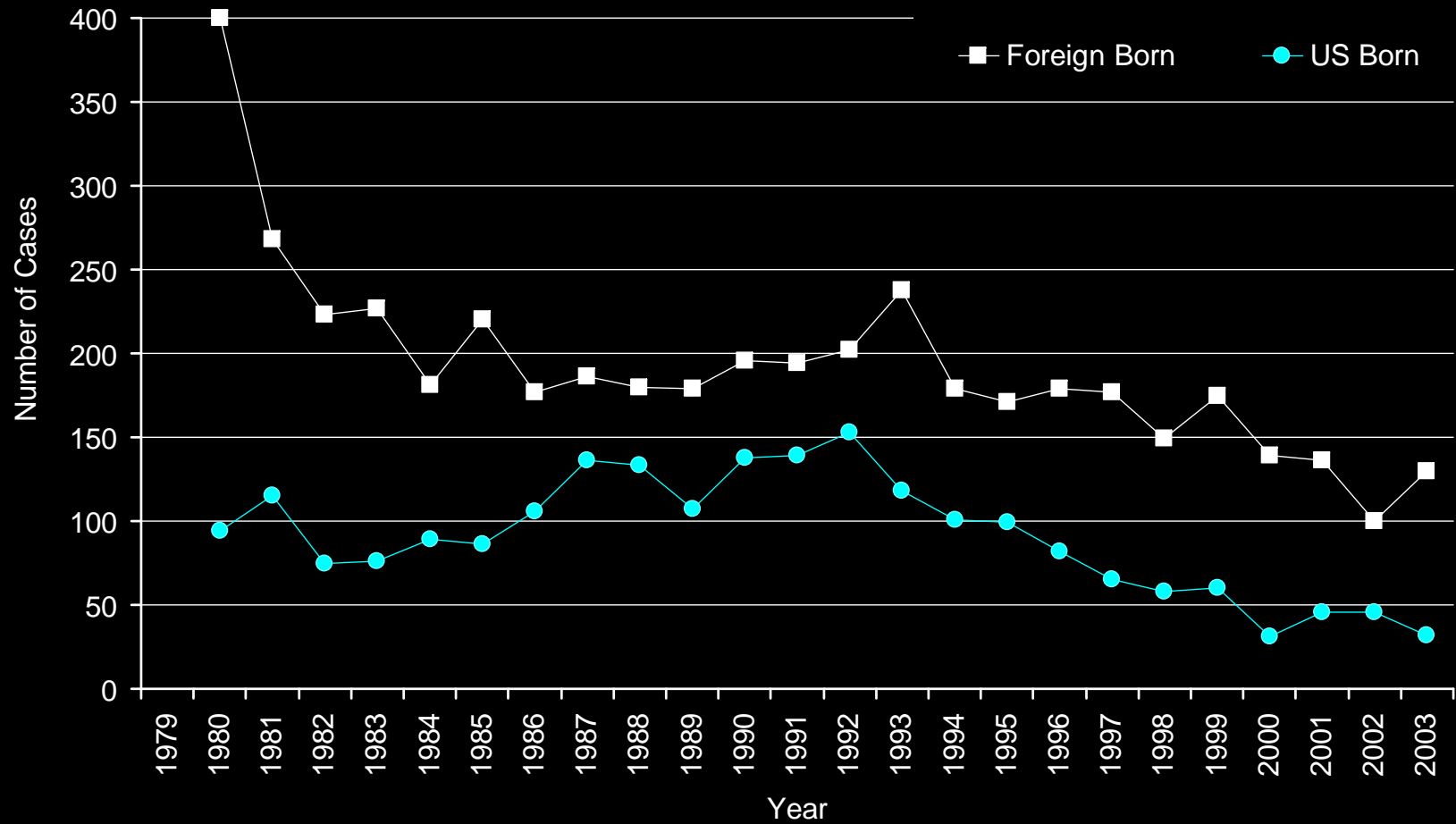


Note: Data referenced to Year 2000 census tracts and population estimates
San Francisco Department of Public Health
Population Health and Prevention Management Information Systems
Created By Jon Hepworth - May 11, 2004

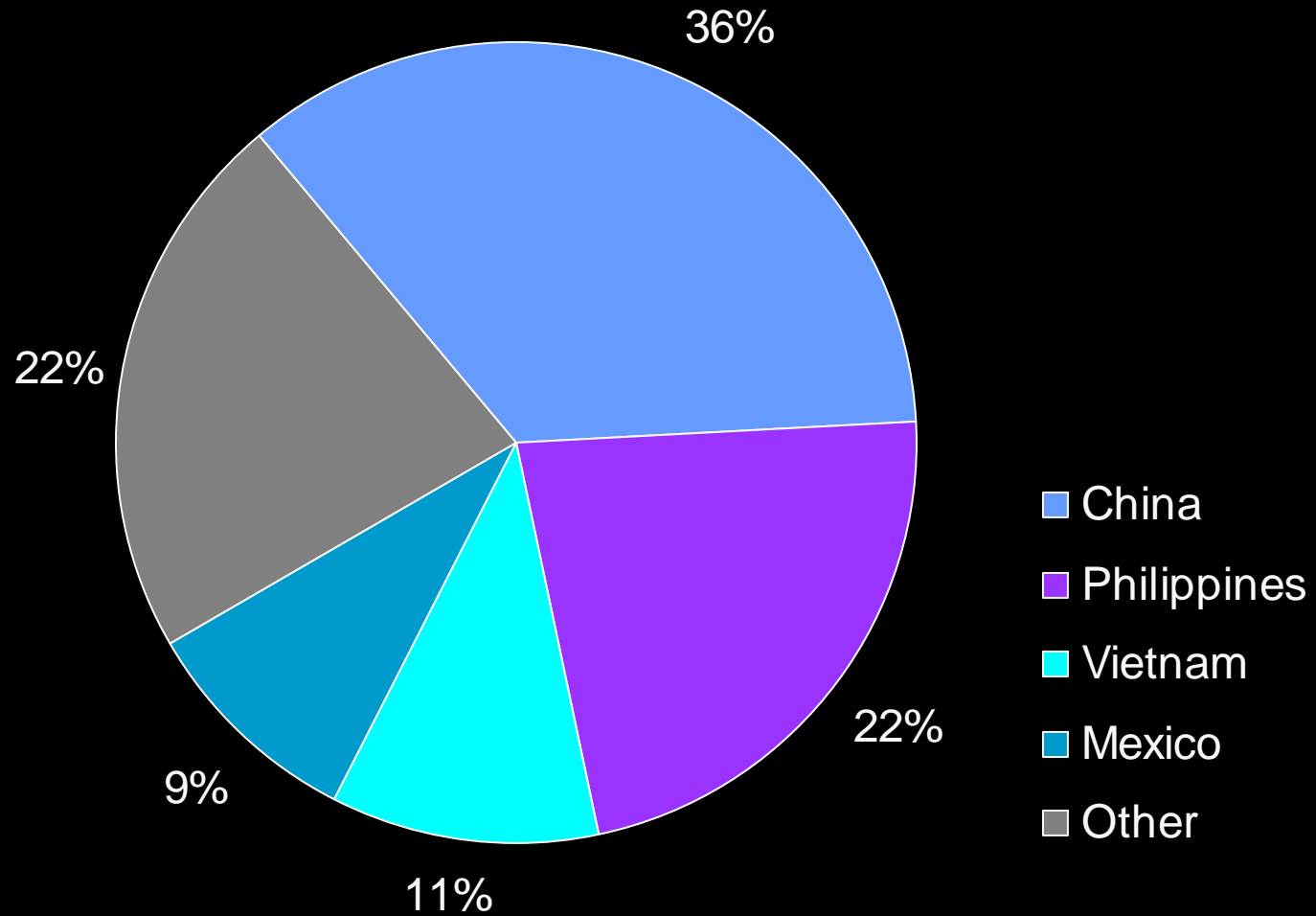
TB Cases: 1990-2003



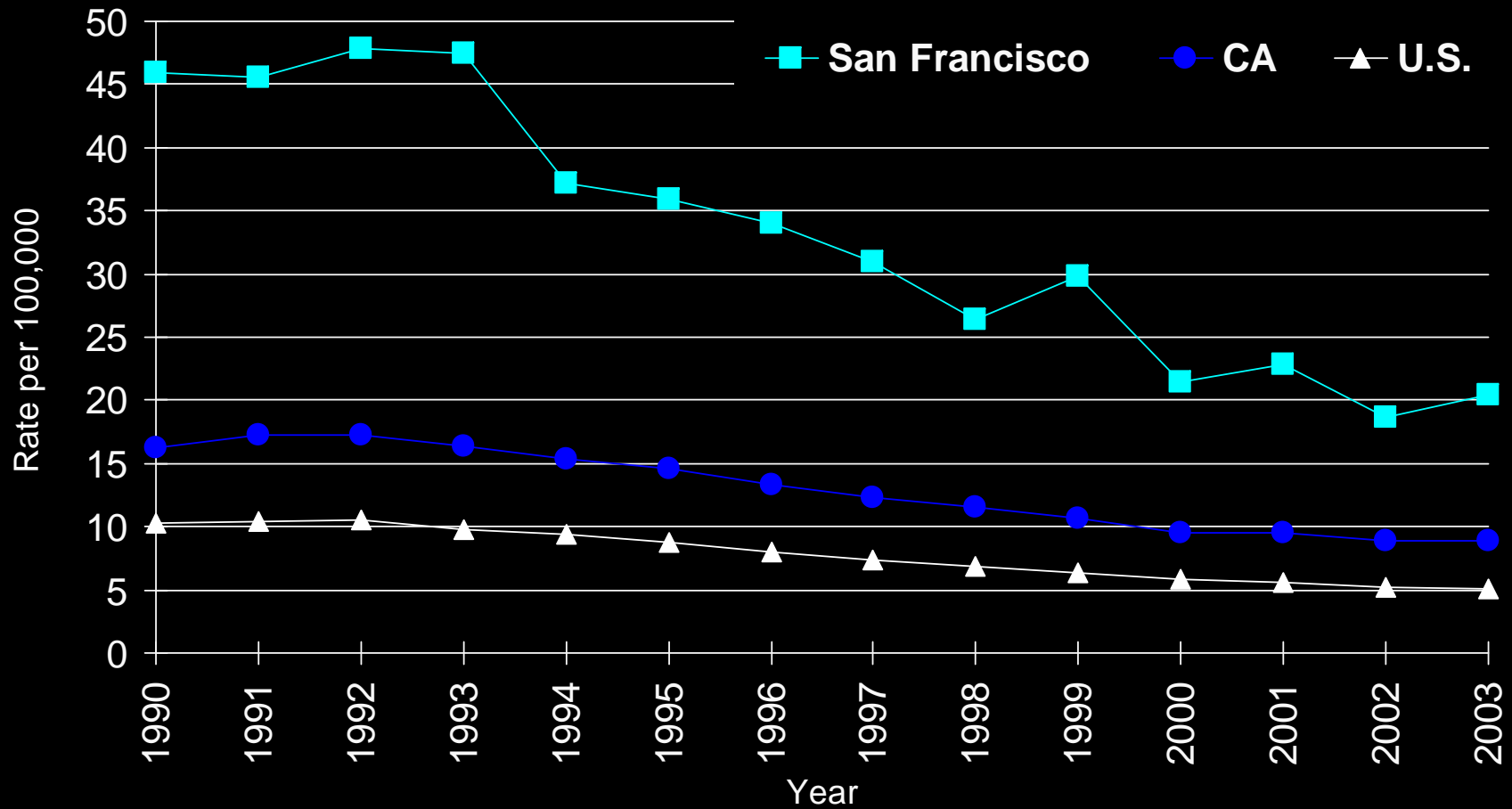
TB Cases: Foreign-born 1990-2003



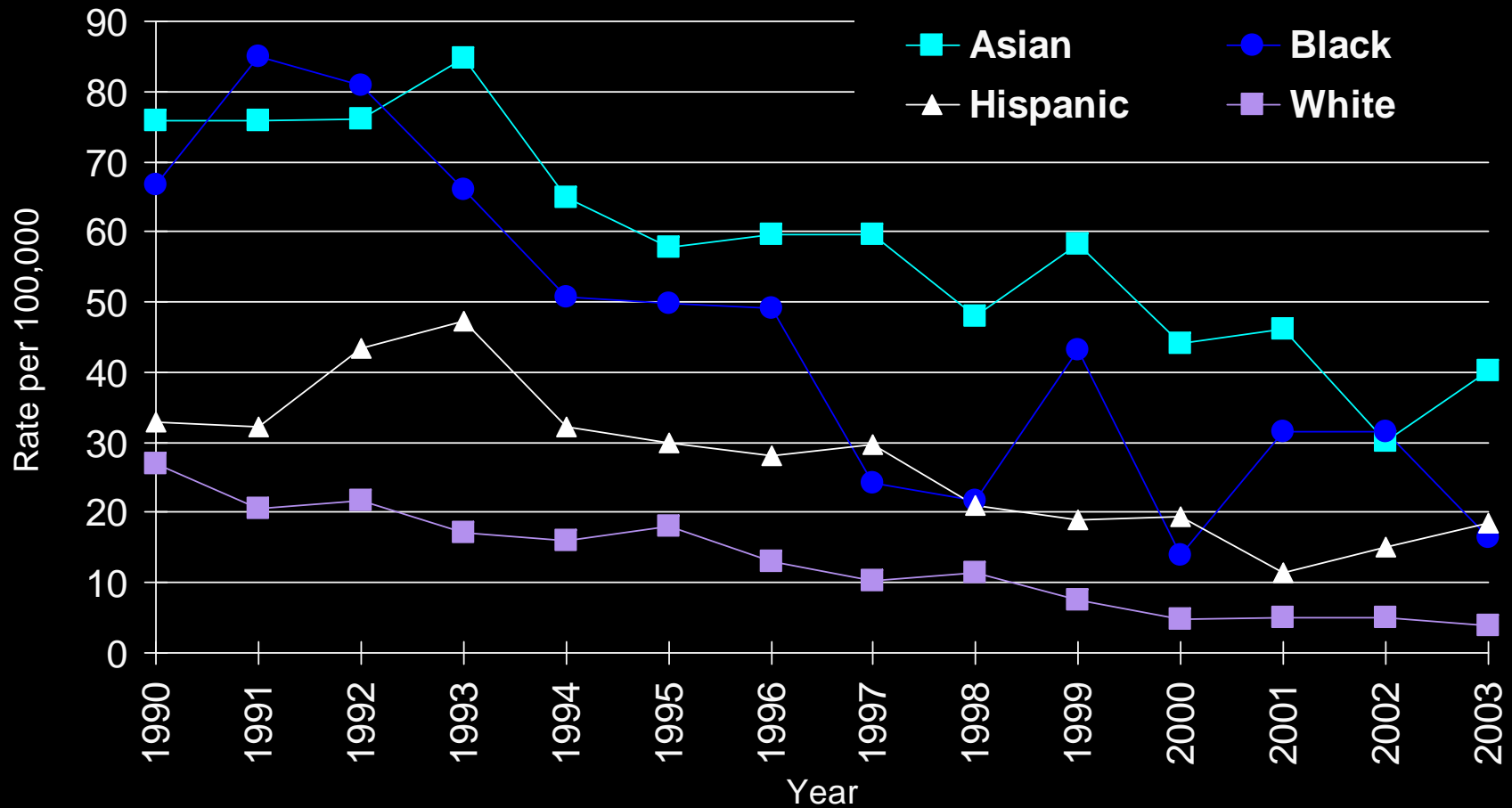
TB Cases: Place of Birth, 2003



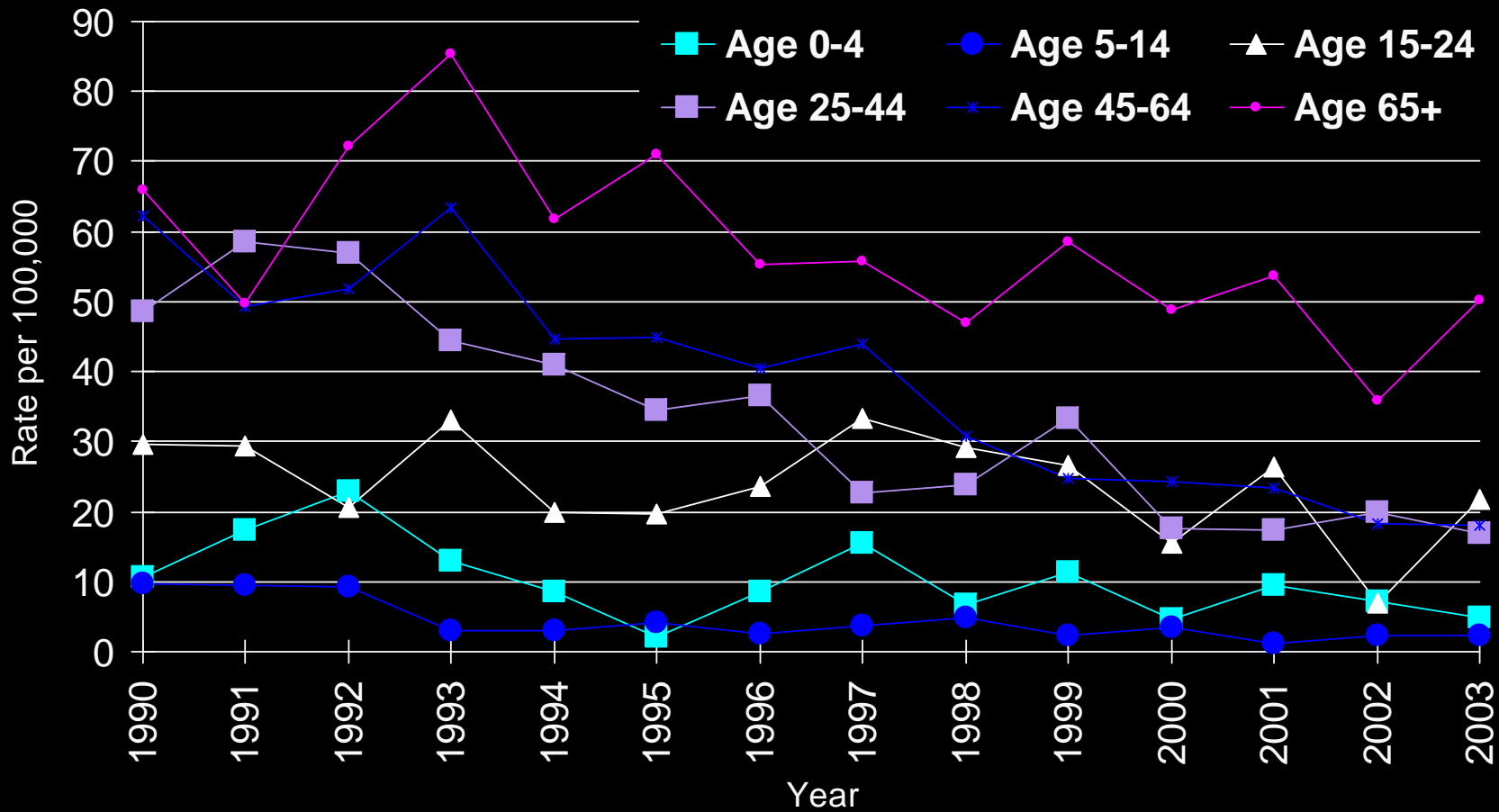
TB Rates: 1990-2003



TB Rates: Race/Ethnicity, 1990-2003



TB Rates: Age Group, 1990-2003



TB in San Francisco: 2003

HIV/ TB:

- ~10% of all cases (2001:7.1%, 2002:19.9%)

Social Factors:

- Homelessness: 13% (50% ↓ from 2002)
- Drug abuse: 6-7% (~50% ↓ from 2002)
- Alcohol abuse: 14% (no decline from 2002)

TB in San Francisco: 2003

Drug Resistance:

- INH: essentially stable for past decade at ~10%
- MDR:
 - 2 cases in 2003 (~1%, 2000: 0 cases, 2001: 4 cases, 2002: 4 cases)
 - 1 case resistant to 5 drugs and 1 case resistant to 11 drugs

TB in San Francisco: 2003

Ethnic Diversity:

- 80% are foreign-born
- 1 in 3 cases is ethnic Chinese
- 90% of foreign-born cases are from China, Philippines, and Southeast Asia
- Cases among African Americans declined this year
 - 2003: 16.5/100,000 (13 cases)
 - 2002: 31.6/100,000 (25 cases)

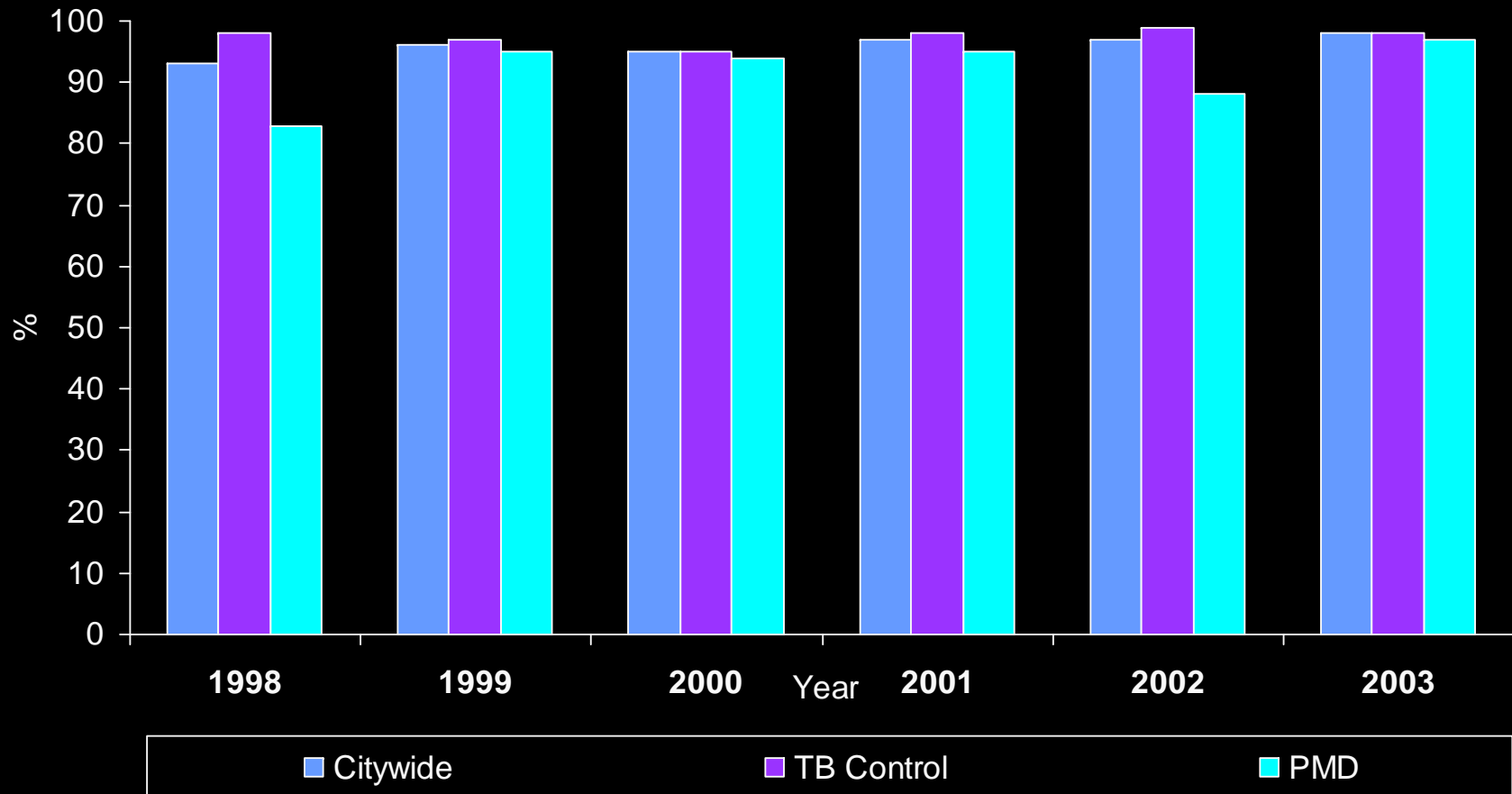
TB Indicators:

Timeliness of Treatment

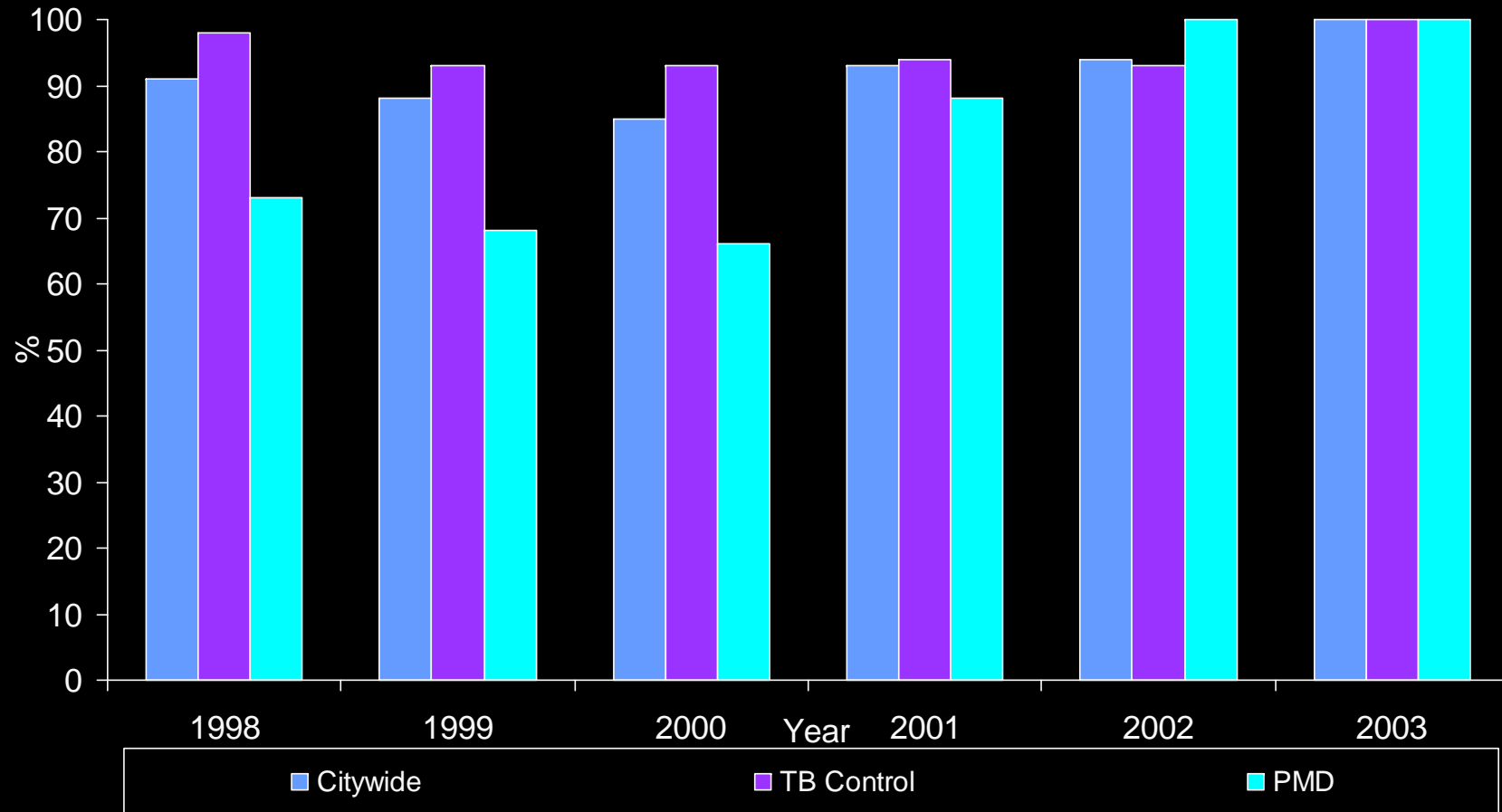
- Time to treatment initiation from AFB smear+ specimen collection
- Goal: Within 4 days
 - Citywide average: 0 days
 - TB Control: 0 days
 - Private Provider: 1 day

We have exceeded this goal for the past 5 years!

TB Indicators: Adequacy of Treatment Initiation



TB Indicators: Sputum Conversion within 3 Months



California 2004 Objective: 70%

TB Indicators: Completion of Therapy



California 2004 Objective: 98% all cases / 85% Rifampin susceptible cases

TB Indicators: Treatment Management

- Acquired Drug Resistance:
 - 1999: 1 case of INH resistance
 - 2003: 1 case of acquired RIF resistance (HIV+ individual treated in 2001 with an intermittent INH/Rifabutin research regimen)
- Management of Drug Resistant Cases:
 - 13 cases reviewed for 2003
 - All cases managed by TB control
 - No management errors observed
- Conclusions:
 - Management of drug resistant cases continues to improve

TB Indicators:

Directly Observed Therapy

- 82 cases eligible for DOT in 2003
 - 64 (78%) placed on DOT during treatment
 - 100% of children <18 years of age
 - 85% (11/13) of INH or RIF resistant cases
 - 90% (19/21) of homeless cases
 - 76% (34/45) of smear+ positive
- Need to improve use of DOT for smear-positive cases.*

TB Indicators:

Contact Identification

- Goal:
 - Contacts identified for >95% of smear+ cases

Objective met since 1997!

- AFB Smear-Positive Cases
 - Cases with zero contacts: 1 (2002: 0 cases)
 - Median contacts per case: 7
- Secondary TB
 - 11 cases found (7% of all cases in 2003)

TB Indicators: Case Assessment/Interview

- Goals:
 - Conduct case assessment within 1 working day
 - Conduct case interview within 3 working days for smear+ and 7 days for smear- cases
- Median time between report and interview: 1 day for both smear+ and smear- cases

Objective met for the past 5 years!

TB Indicators: Contact Evaluation

- Goal:
 - 95% of contacts to smear+ cases will be evaluated for infection and disease
- Objective *MET* in 2002:
 - 95% evaluated
- Objective *NOT MET* in 2003:
 - 93% evaluated

TB Indicators: Contact Initiation of LTBI Tx

Time Period	Number of Contacts Eligible for Treatment		Number and (%) Contacts Starting Treatment	
	< 15 years old	≥ 15 years old	< 15 years old	≥ 15 years old
2001	16	368	12 (75)	288 (78)
2002	13	195	11 (85)	145 (74)
2003	14	256	12 (86)	171 (67)

Goals: 95% <15 yrs old, 75% >15 yrs old

Objective NOT Met in either age group!

TB Indicators: Contact Completion of LTBI Tx

- Goals: AFB Smear+ and Smear-/Culture+
 - 95% <15 yrs old / 85% ≥15 yrs old
- *Objectives not met for 2000, 2001, 2002 or 2003.*
 - Intensified contact oversight began in mid-2000.
 - Projected 2003 completion rates:
 - 80% <15 yrs / 91% ≥15 yrs (only 1 did not complete)

TB Indicators: B-notification Program

- Goals:
 - 90% evaluation within 30 days of notification
 - 95% placement of eligible migrants on LTBI Tx
 - 75% completion of LTBI Tx
- 92% evaluated in 2003 (all but 1 by SFTB)
- 94% started LTBI Tx
- 85% completed LTBI Tx
- 10 cases found (6% of all cases in 2003)

TB Indicators: Jail Screening Program

- 12,158 inmates screened
 - TST placement decreased 17.8% from 2002
 - 71% of TSTs placed were read (a slight increase from 2002)
 - 28% decline in TST reading during July – Dec 2003 compared to July – Dec 2002

Declines due to loss of 2 full-time screening positions at the end of 2002-2003 fiscal year.

- 3 cases were identified in 2003

TB Indicators: Surveillance

- Goals:
 - Report all verified cases of TB to the State and CDC on a monthly basis
 - 95% completeness of data entry of RVCT variables
 - Review all death certificates
 - Perform HIV/AIDS and TB registry matches

All Goals met: 100%!

TB Indicators: Targeted Testing Referrals

Year	Total Referred	Evaluated		Confirmed Cases (TB 3)		LTBI TB2/TB4	
		#	%	#	%	#	%
1999	2791	2758	99	60	2	2485	90
2000	3033	2974	98	59	2	2690	90
2001	3393	3224	95	55	2	3017	94
2002	3844	3658	95	91	2	3396	93
2003	3441	3412	99	134	4	3066	90

- Goal: Increase referrals by 2% annually
 - 12-13% increase annually in 2001 and 2002
 - 10% decrease in 2003
 - Since 1999, 25% increase in referrals

TB Indicators: TT LTBI Treatment Completion

Year	Eligible for LTBI Rx	Started on LTBI Rx		Completed LTBI Rx	
		#	%	#	%
1999	_____	1656	66	1195	76
2000	_____	1760	65	1171	70
2001	_____	2017	67	1382	72
2002	_____	2124	63	1464	75*
2003	2401	2127	89	1370	70*

- Goal: >75% complete treatment
- Projected rates: 2002 ~75% / 2003 ~70%

TB Indicators: CHOPS LTBI Treatment

Year	Total LTBI Tx	Completed	Died/ Moved/ AdvRxn	Lost/ Refused	Still on Tx
2000 (Sept-Dec)	275	248 (93%)	9	18	0
2001	486	440 (91%)	8	38	0
2002	495	443 (89%)	4	38	10
2003	500	418 (84%)	4	27	51

- 834 DOT visits, 32 DOPT visits, 2582 refills, and 1,432 TSTs placed and read
- ~ 1/3 of all pts on LTBI Tx refill at CHOPS

TB Indicators: CHOPS TST Results, 2003

Age Group	TSTs read	TST Positive	
		#	%
0-15	385	110	29
16-30	235	97	41
31-45	150	78	52
46-60	178	98	55
>60	63	40	63
Total	1017	423	42

TB Indicators: South of Market Health Center

Year	Referrals for...					
	Filipino		Other Foreign-Born		US-Born	
	# Identified	% Screened	# Identified	% Screened	# Identified	% Screened
1999	6	94	8	75	20	30
2000	159	77	134	80	774	80
2001	105	86	104	78	708	79
2002	138	86	119	89	591	84
2003	110	87	83	80	384	72

- Total initiating LTBI Tx in 2003: 48 (89%)
- Projected rate of LTBI completion: 57%

TB Indicators: Methadone Treatment Programs(HRTP)

- 100% of those enrolled at Ward 93 in 2003 were screened for TB
- 100% completed evaluation within 4 weeks of screening
- Total Initiating LTBI Rx: 20 (91%)
- Completion of LTBI Rx: 18* (90%)

*projected completion rate

TB Indicators: TOPS Screening

	2001 (%)	2002 (%)	2003 (%)
Total Identified	3013	1964	1254
Hx TST+	383 (13)	233 (12)	213 (17)
TB Test Given	2630 (87)	1731 (88)	1038 (83)
TB Test Read	2320 (88)	1554 (90)	911 (88)
TB Test +	379 (16)	401 (26)	117 (13)
Total Screened	2730 (90)	1787 (91)	1121 (89)

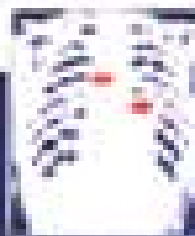
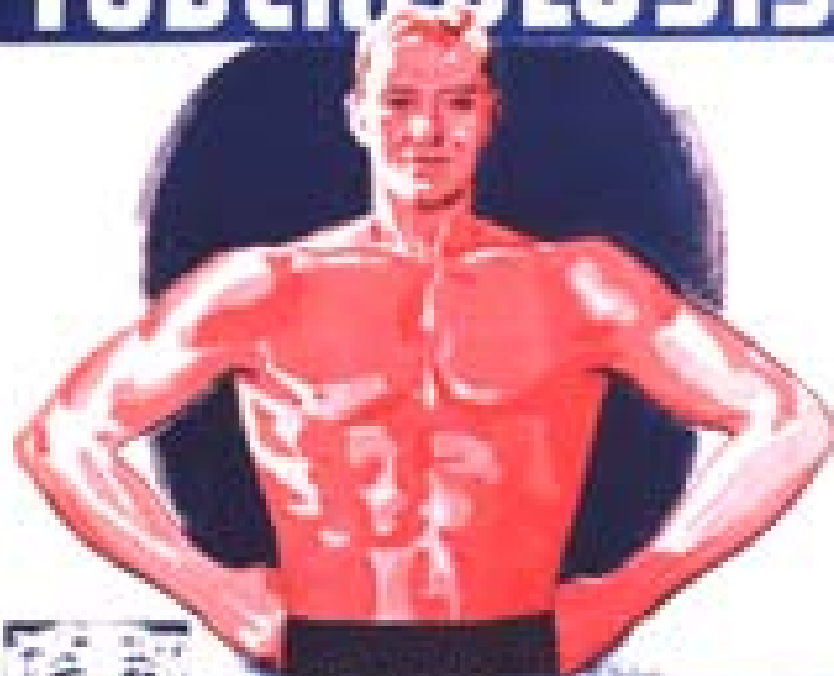
TB Indicators: TOPS Treatment

	2001 (%)	2002 (%)	2003 (%)
Total Started	255	188	152
Completed	137 (54)	126 (67)	98
% Completed w/ Exclusions	94%	77%	75%
Completed by DOPT	98 (54)	94 (66)	85(71)
Comp by DOPT w/ Exclusions	95%	79%	74%
Completed by SAT	39 (53)	32 (70)	10(60)
Completed by SAT w/ Exclusions	91%	71%	59%

January – June 2004: Case Counts

- Decrease in cases: Jan – June = 64 cases
- At current rate, total for 2004 will be ~120 cases
- Where are the cases coming from:
 - no change in # identified through B-notification (~6%)
 - No change in # identified through targeted testing (~70%)
 - **BIG** increase in # identified through contact investigation
 - 18% of all cases during first half of 2004 (compared to 7% in 2003)
 - *Due to pediatric outbreak in Mission district!*

"Healthy looks" can hide
TUBERCULOSIS



the **X-RAY** will show it
before *you* know it

Christmas Seals Fight Tuberculosis