

Report on Tuberculosis in San Francisco: 2012

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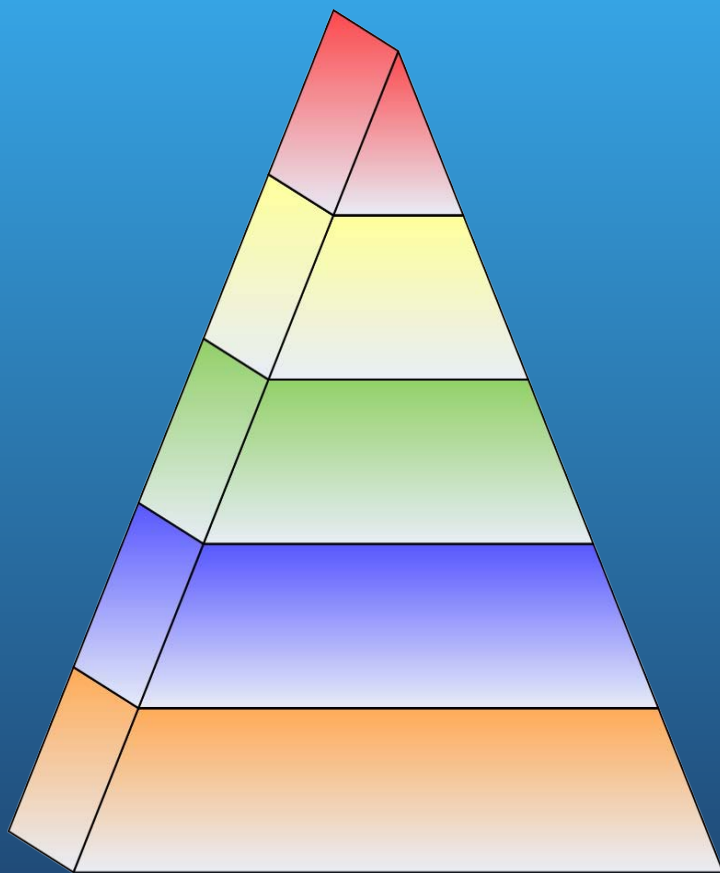
San Francisco Department of Public Health

Tuberculosis is an airborne disease



<http://classconnection.s3.amazonaws.com/426/flashcards/697426/jpg/sneeze-k-1711315696758626.jpg>

Span of TB Control Activities San Francisco - 2012



116 San Franciscans with TB

Over 500 TB Suspect Cases

950 Contacts to Cases

50,000 San Franciscans Infected

820,000 San Franciscans

San Francisco Tuberculosis Cases Have Been Increasing since 2010

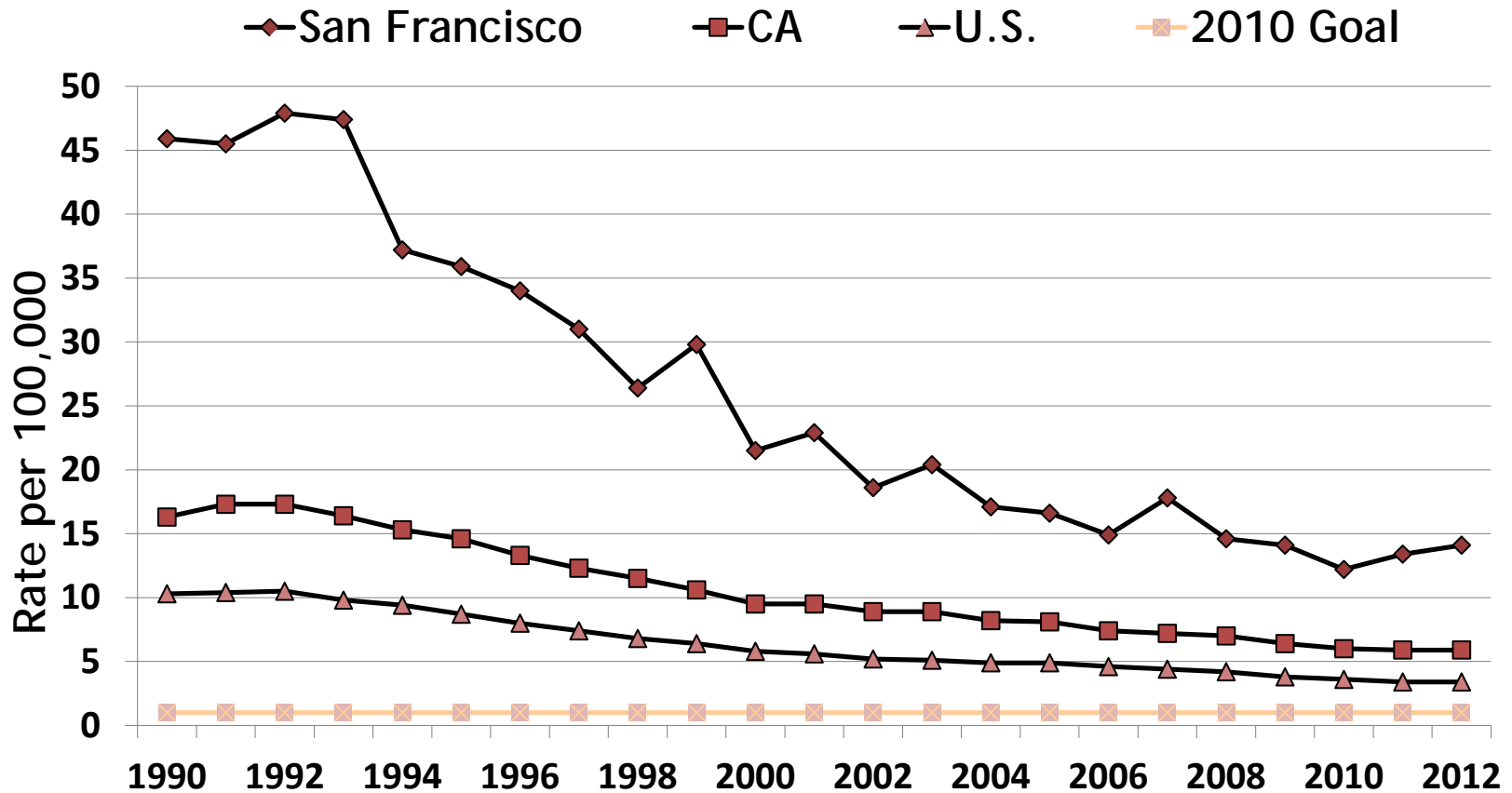


Figure 1. TB Case Rates by Year, 1990-2012

Where are the TB cases in San Francisco?

	2008-2009 Average	2012 Total	Difference
All	116.5	116	-0.5
US-born	27	24	-3
Foreign-born	89.5	92	2.5
Asian/PI	73.5	81	7.5
<i>Chinese</i>	<i>35.5</i>	<i>38</i>	<i>2.5</i>
<i>Filipino</i>	<i>18.5</i>	<i>19</i>	<i>0.5</i>
<i>S.E. Asian</i>	<i>9.5</i>	<i>12</i>	<i>2.5</i>
<i>Other</i>	<i>9</i>	<i>12</i>	<i>3</i>
Black	10.5	15	4.5
Hispanic*	20.5	6	-14.5
White	11.5	12	0.5
Age 0-14	4.5	2	-2.5
Age 15-24	10.5	10	-.5
Age 25-64	65	74	9
Age 65+	36.5	30	-6.5
Homeless	15	12	-3

*p<0.05

San Francisco TB Cases by Race/Ethnicity

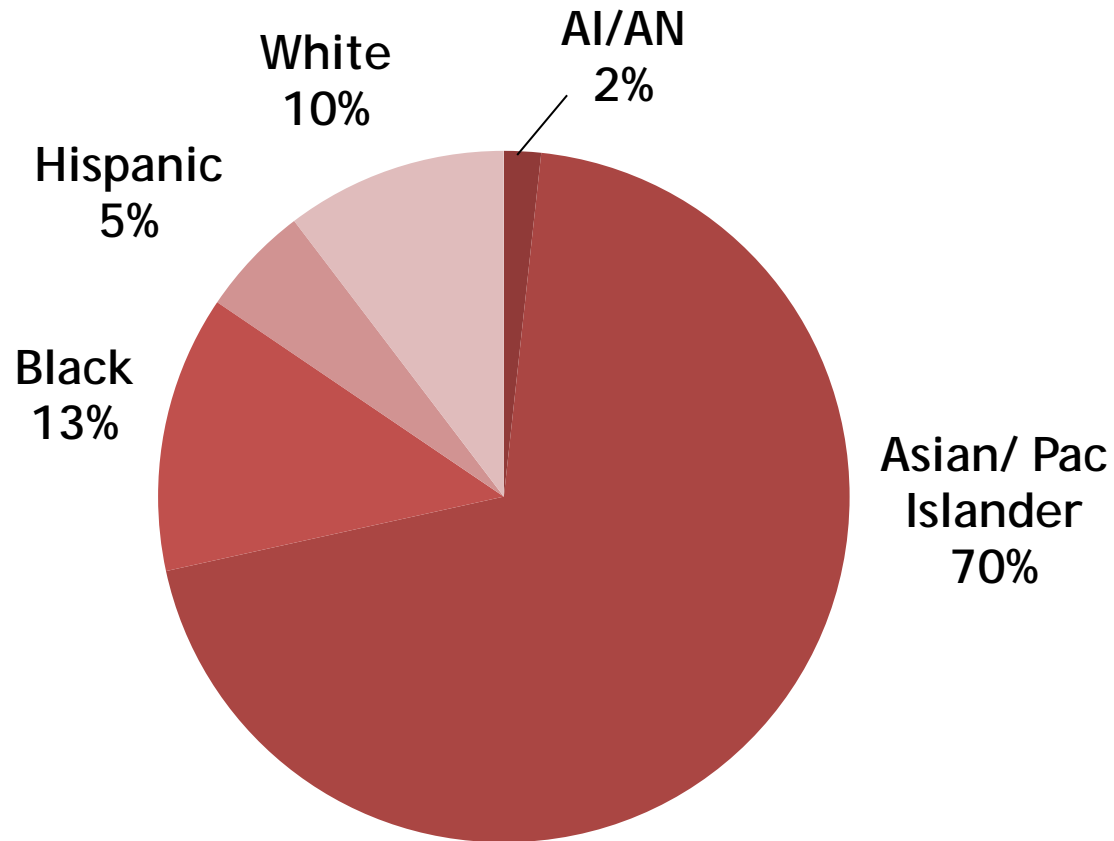


Figure 3. 2012 TB Cases by Race/Ethnicity

San Francisco Foreign Born TB Cases by Country of Origin

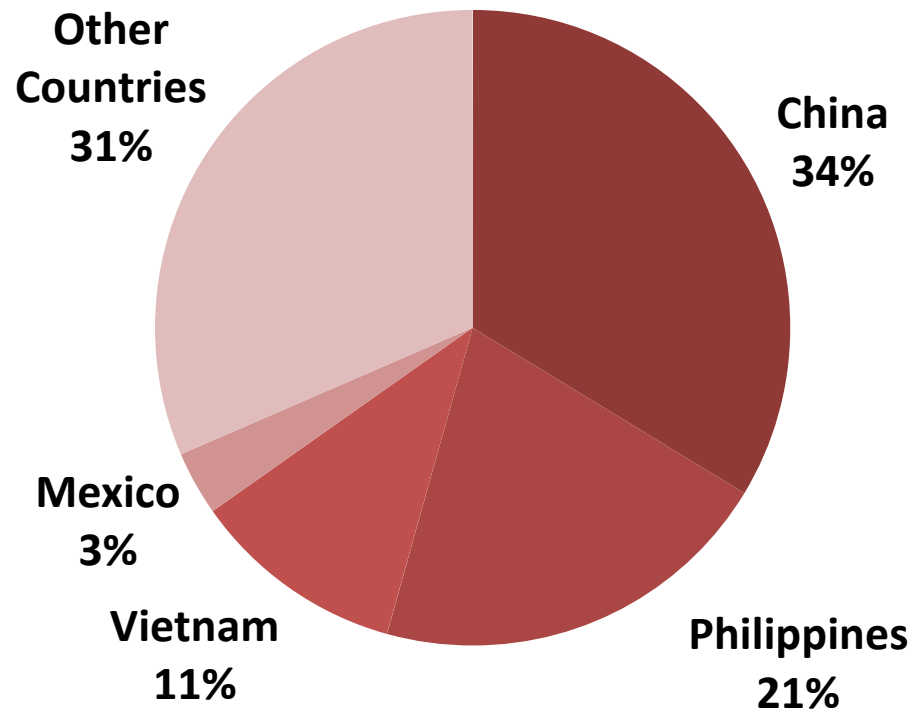
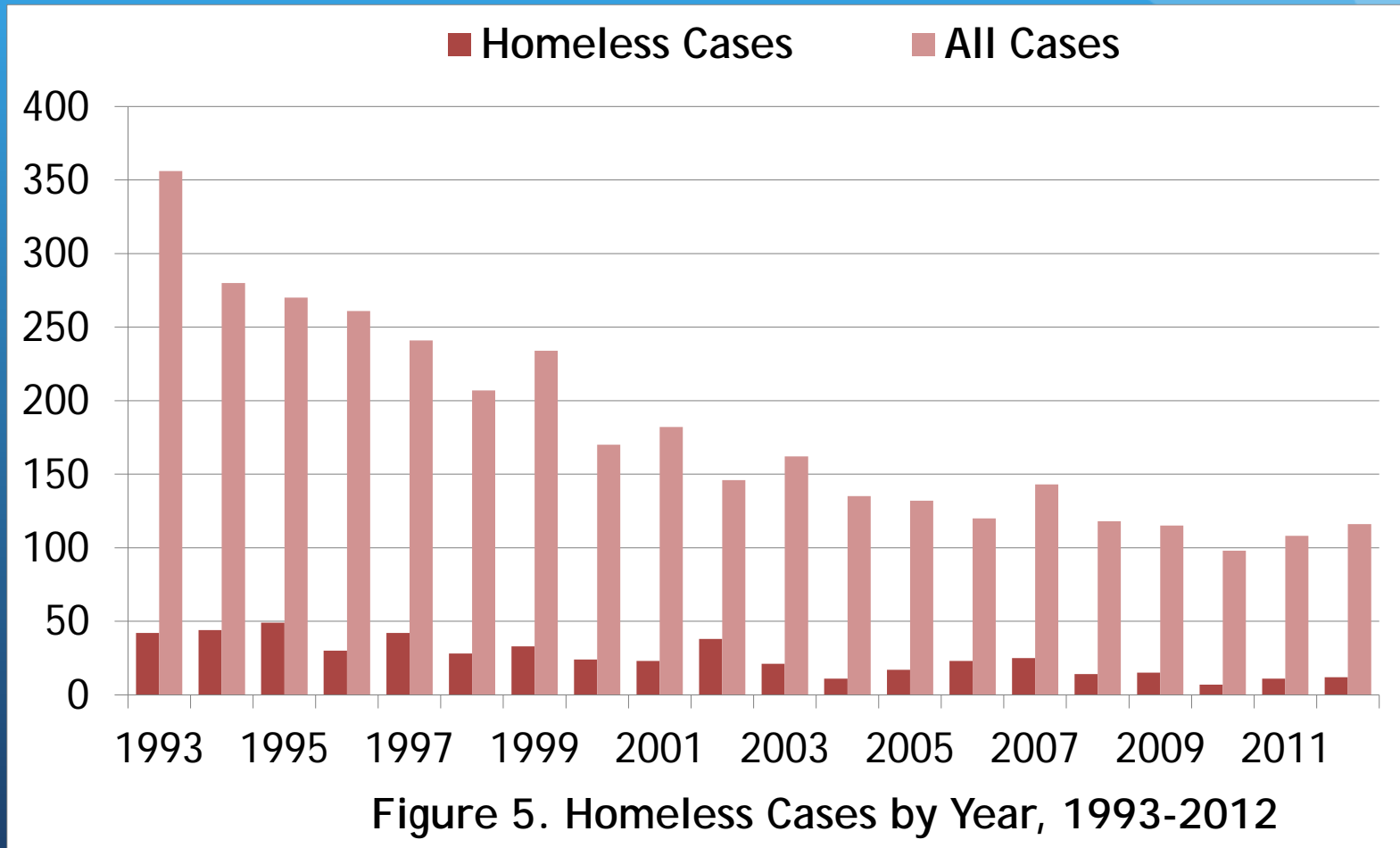
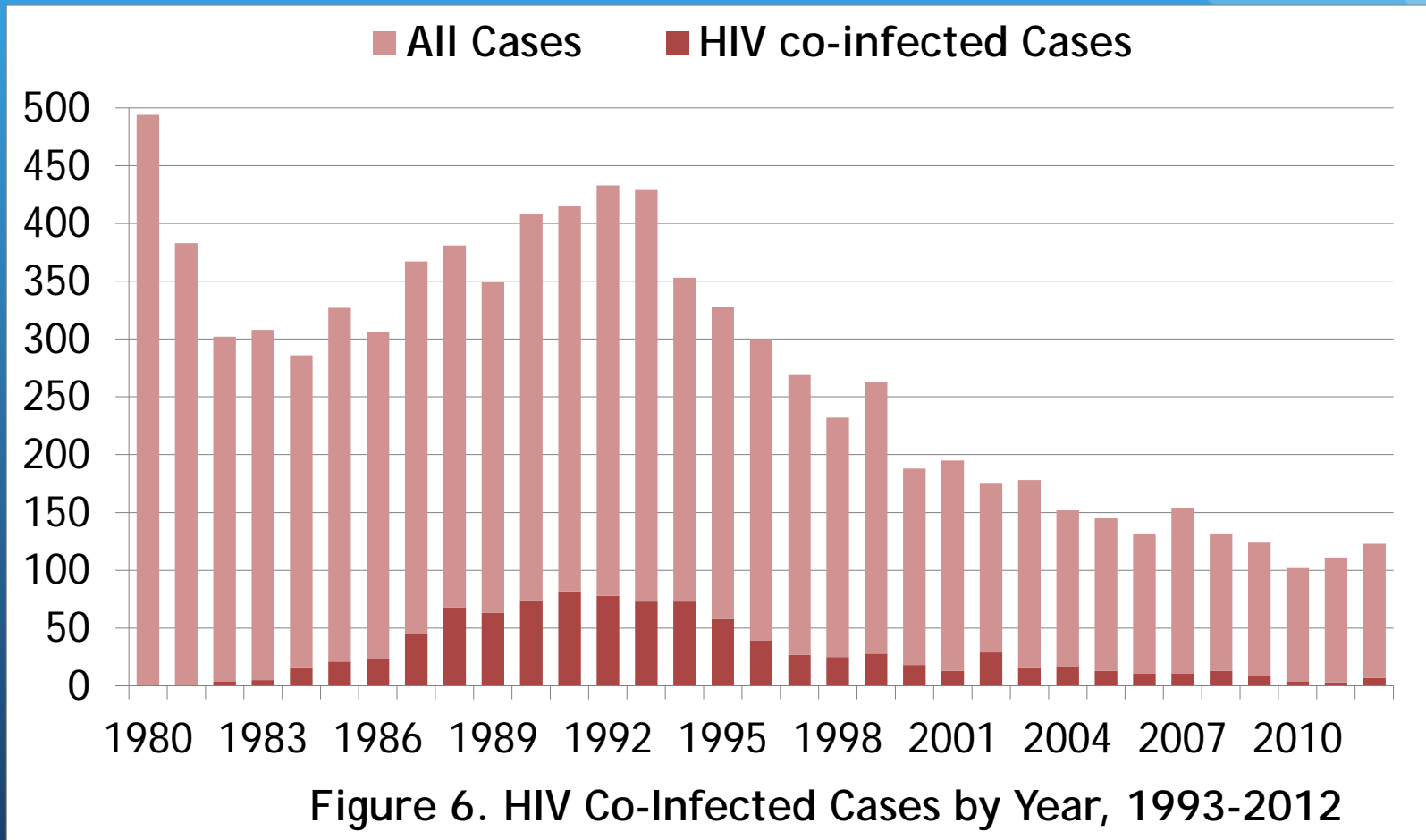


Figure 4. 2012 Foreign-born TB Cases by Country of Birth

Tuberculosis Cases in San Francisco in the Homeless



HIV Co-infected Tuberculosis Cases in San Francisco



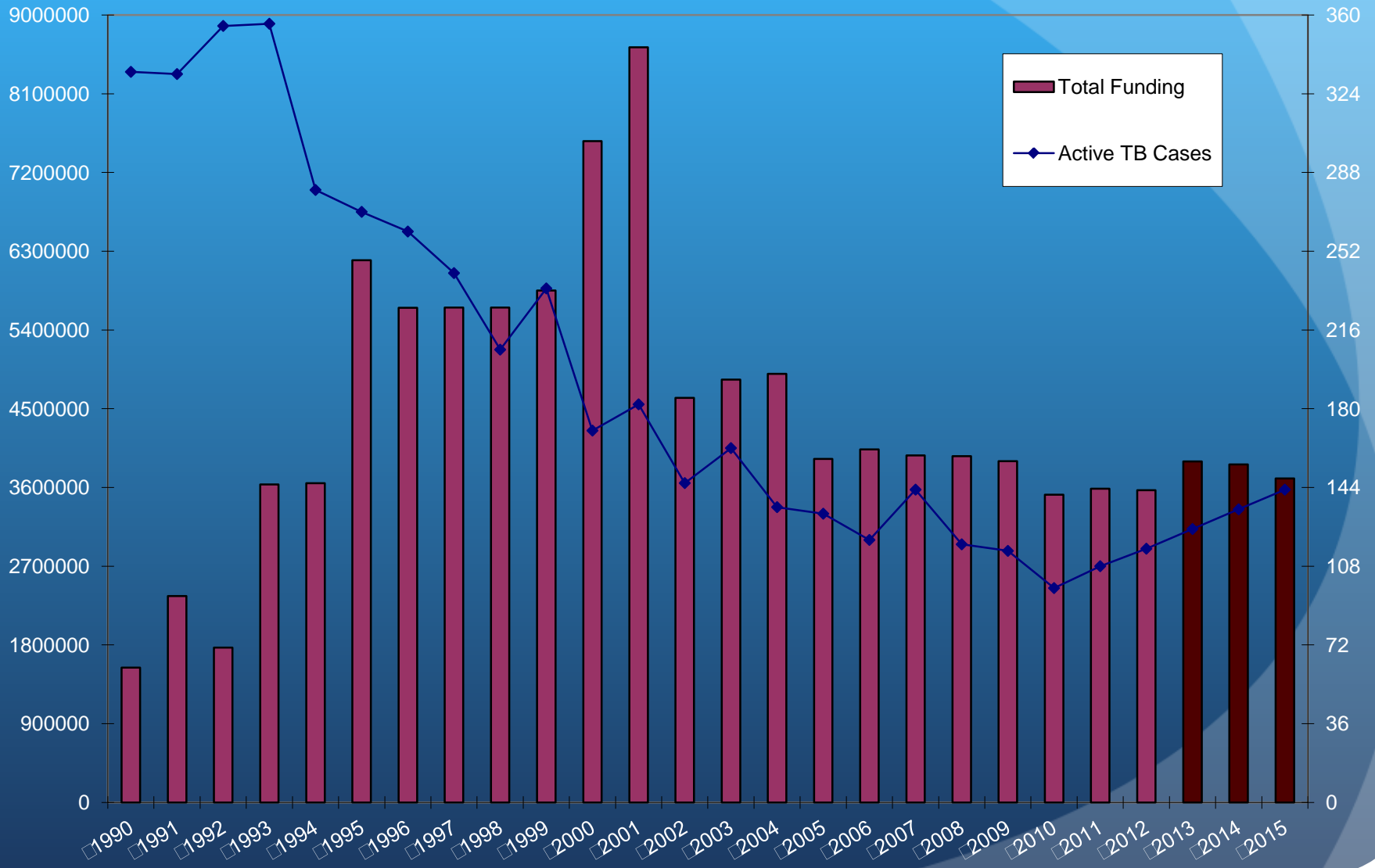
Indicators of Severe TB Disease in San Francisco: 2012

	Number (%)	Average 2008-2009
Deaths	9 (8)	9.5
AFB Smear Positive	37 (45)	40.5
Culture Positive	84 (72)	88.5
Drug Resistant	16 (19)	12.5
• Isoniazid only	9 (11)	3.5
• Multi-Drug Resistant	1 (1)	0.5
• Poly-Drug Resistant	6 (7)	2.5
• Extremely Drug Resistant	0	0

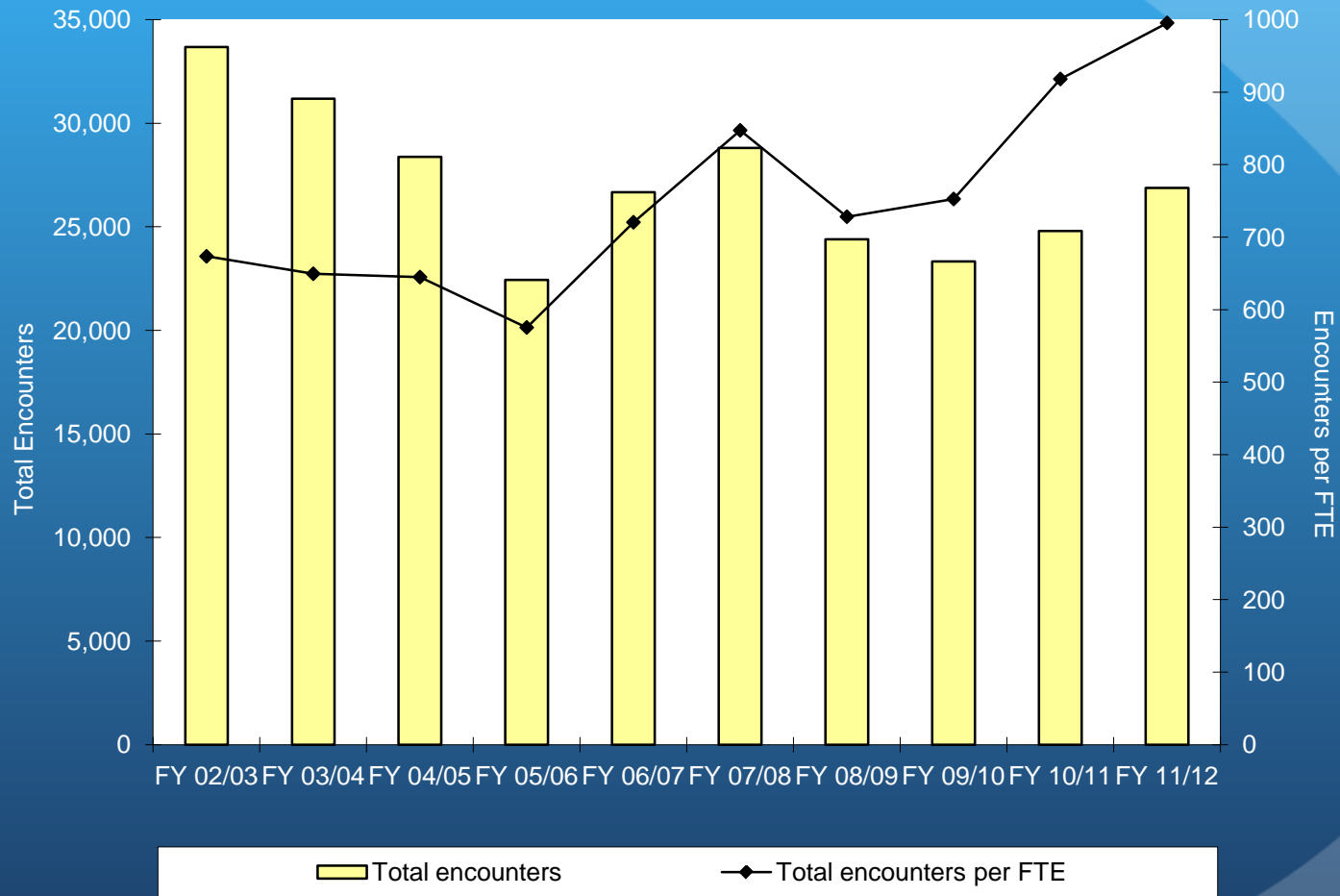
Why the increase in TB cases?

- No outbreaks
- Indicators of severe disease are unchanged
- Federal funding to support local TB programs has been reduced
- Capacity to perform unique public health functions has significantly decreased

San Francisco TB Cases are Rising as Funding Decreases



TB Clinic Encounters 2002-2012



FY = Fiscal Year (July - June)

Public Health TB Program Unique Activities

- Receive reports of TB cases and suspects and ensure that evaluation and treatment are initiated
- Perform contact investigations in the home and other exposure sites (worksites, schools, shelters)
- Field workers to administer medications, locate patients, facilitate treatment and monitoring
- Use of legal authority to ensure adherence to anti-TB treatment
- Receives funds for incentives and enablers (e.g. bus tokens, housing, food coupons) to promote treatment adherence

The Affordable Care Act will not support these activities

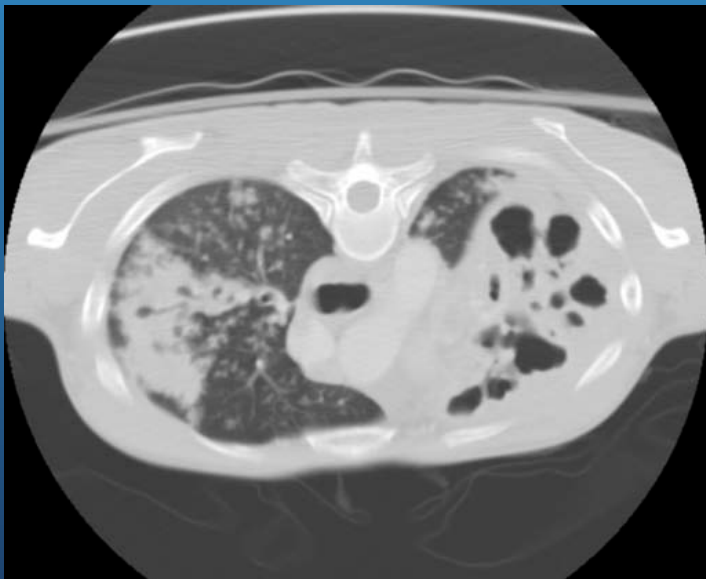
TB Program Surveillance and Field Staff



- Day in the Life of DCI Candy Box
- Patient 1 - Elderly pt with severe TB having difficulty managing his care at home
- Patient 2 - Infectious hospitalized pt threatening to leave AMA

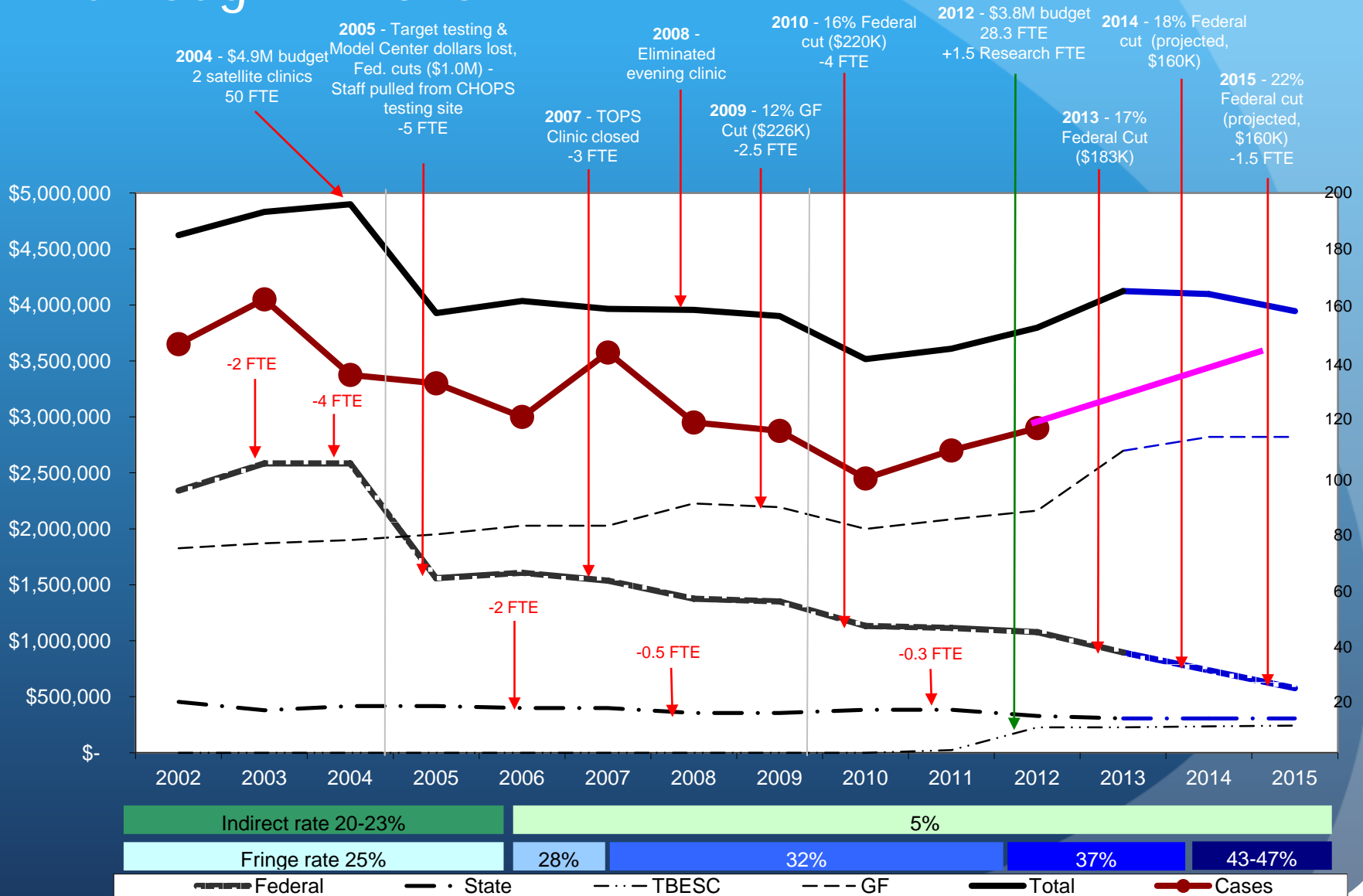


Normal Lung

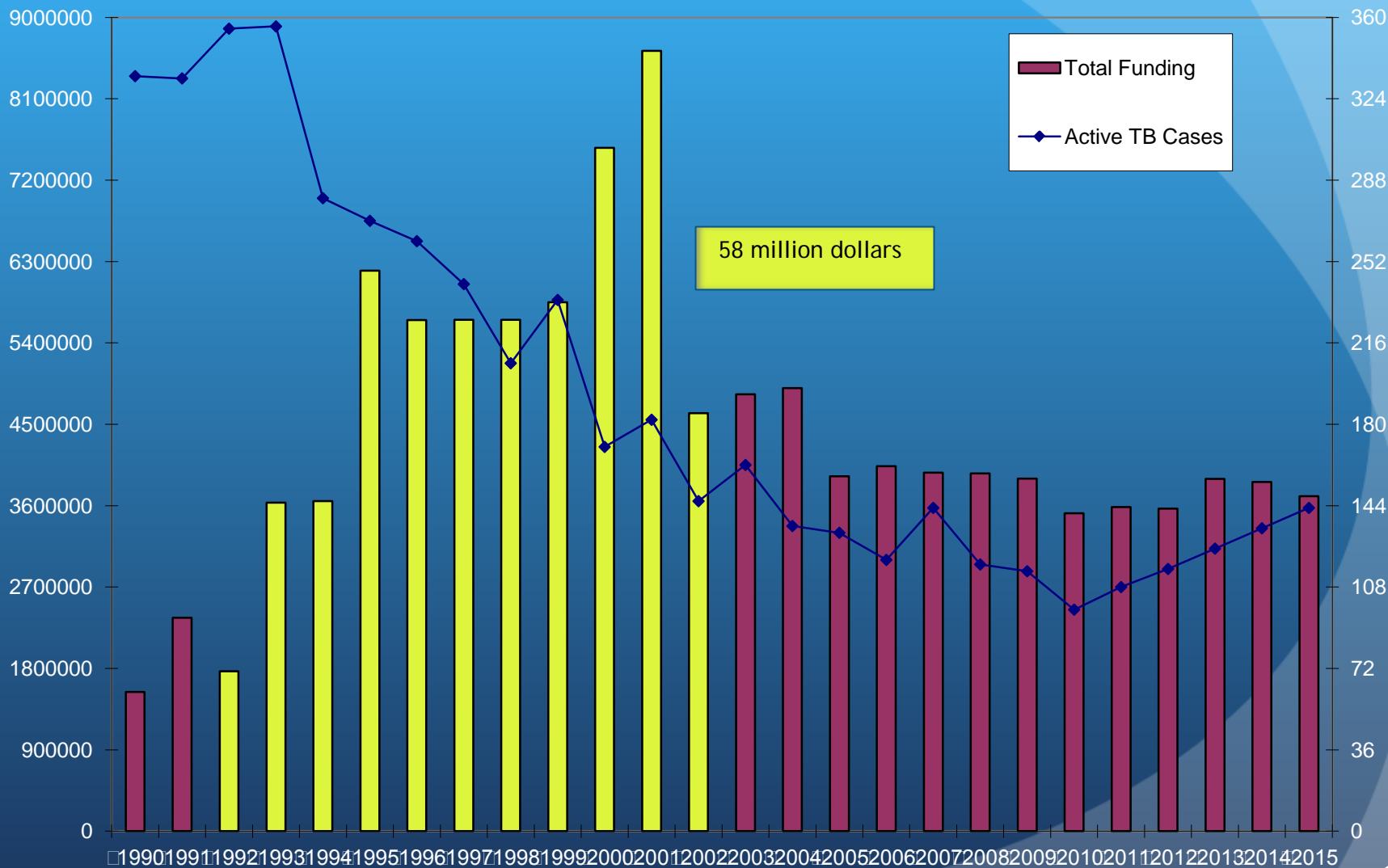


Pt 2
Cavitary AFB Smear
Positive Tuberculosis
Drug Resistant

Federal Funding Will Continue to Decrease through FY2015



The cost of losing control of TB



Plan of Action for TB Control Section 2013

- Redirect diagnosis and treatment of TB infection to the community to reduce referrals to the clinic by 32%. TB clinic will continue to provide direct clinical services to:
 - TB Cases
 - TB Suspects
 - Undocumented
 - High risk TB infection (on chemotherapy, HIV/AIDs, immunosuppressive medications)
- Support best practice for screening and treatment of TB infection in the community
 - Make diagnosis and treatment of TB infection a performance indicator in SF in the community
- New regimen for TB infection (3HP)
 - 12 weekly doses - directly observed therapy required
- Embrace technology
 - Videophones to perform directly observed therapy (research)
 - Meaningful use of the electronic medical record/surveillance record
- Reorganization of the Population Health and Prevention Division

Acknowledgements

Jennifer Grinsdale, MPH Program Manager

TB Control Section

