



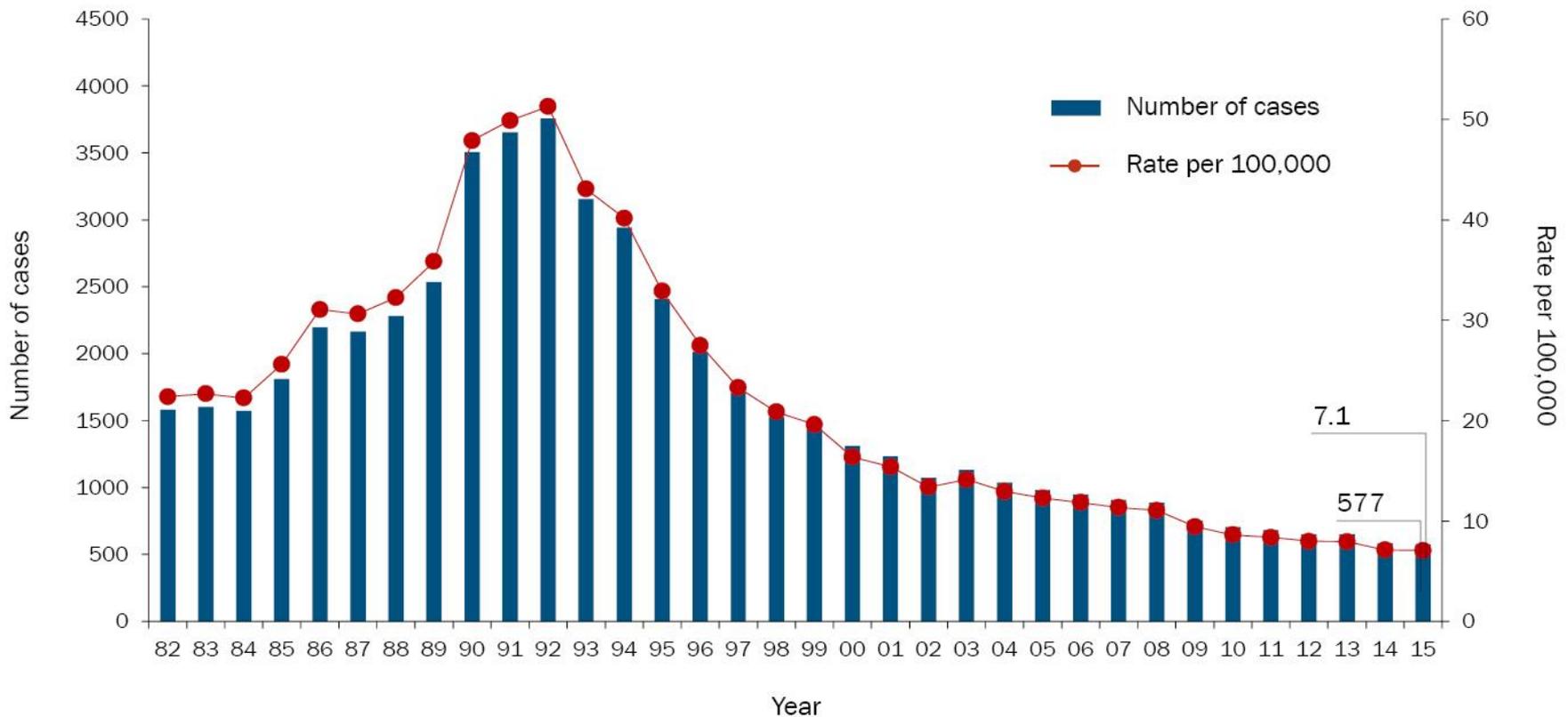
**TUBERCULOSIS IN NEW YORK CITY, 2015**

NEW YORK CITY BUREAU OF TUBERCULOSIS CONTROL ANNUAL SUMMARY

# **TUBERCULOSIS IN NEW YORK CITY, 2015**

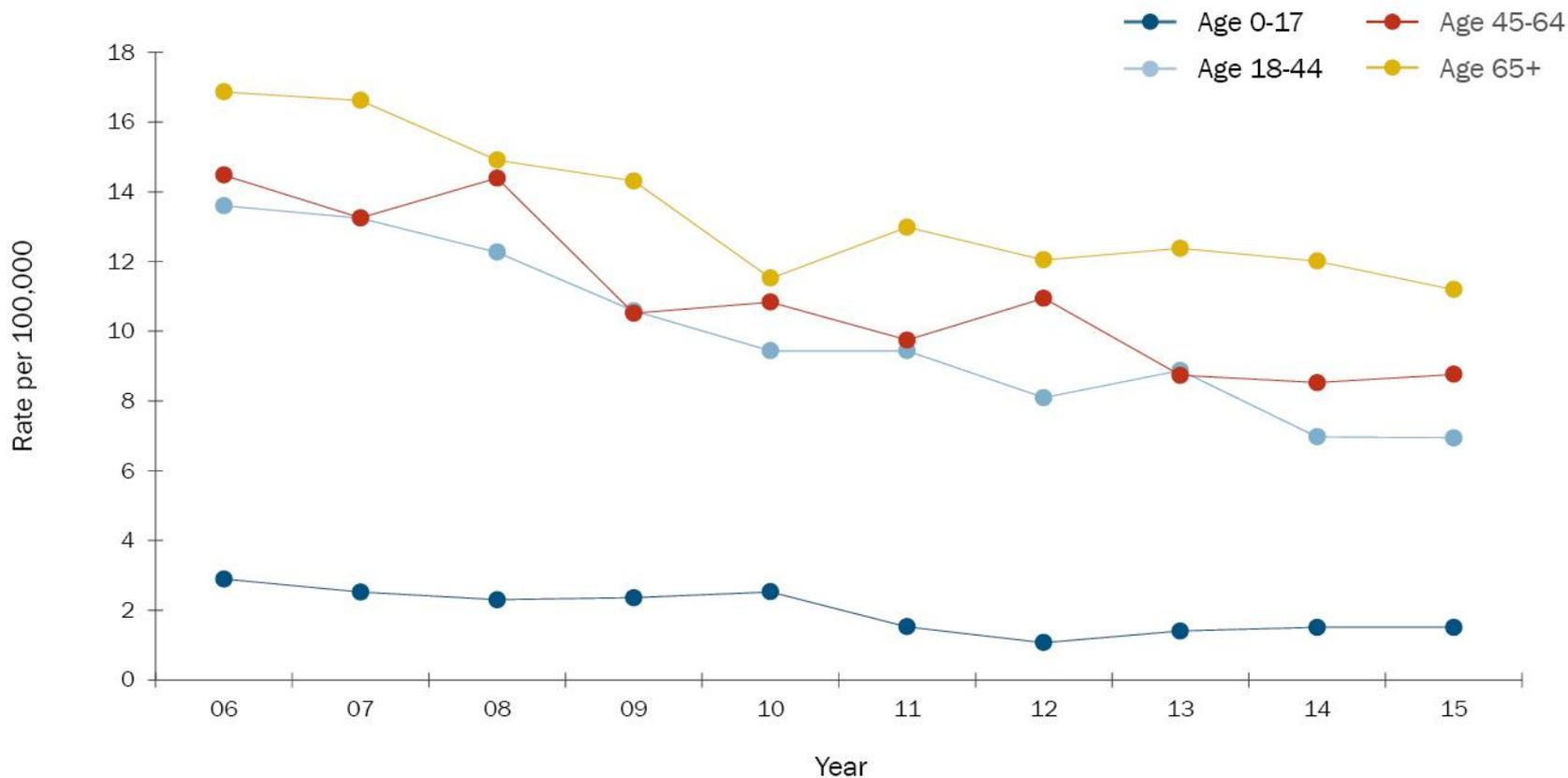
New York City Department of Health and Mental Hygiene  
Bureau of Tuberculosis Control

# TUBERCULOSIS CASES AND RATES,<sup>1</sup> NEW YORK CITY, 1982-2015



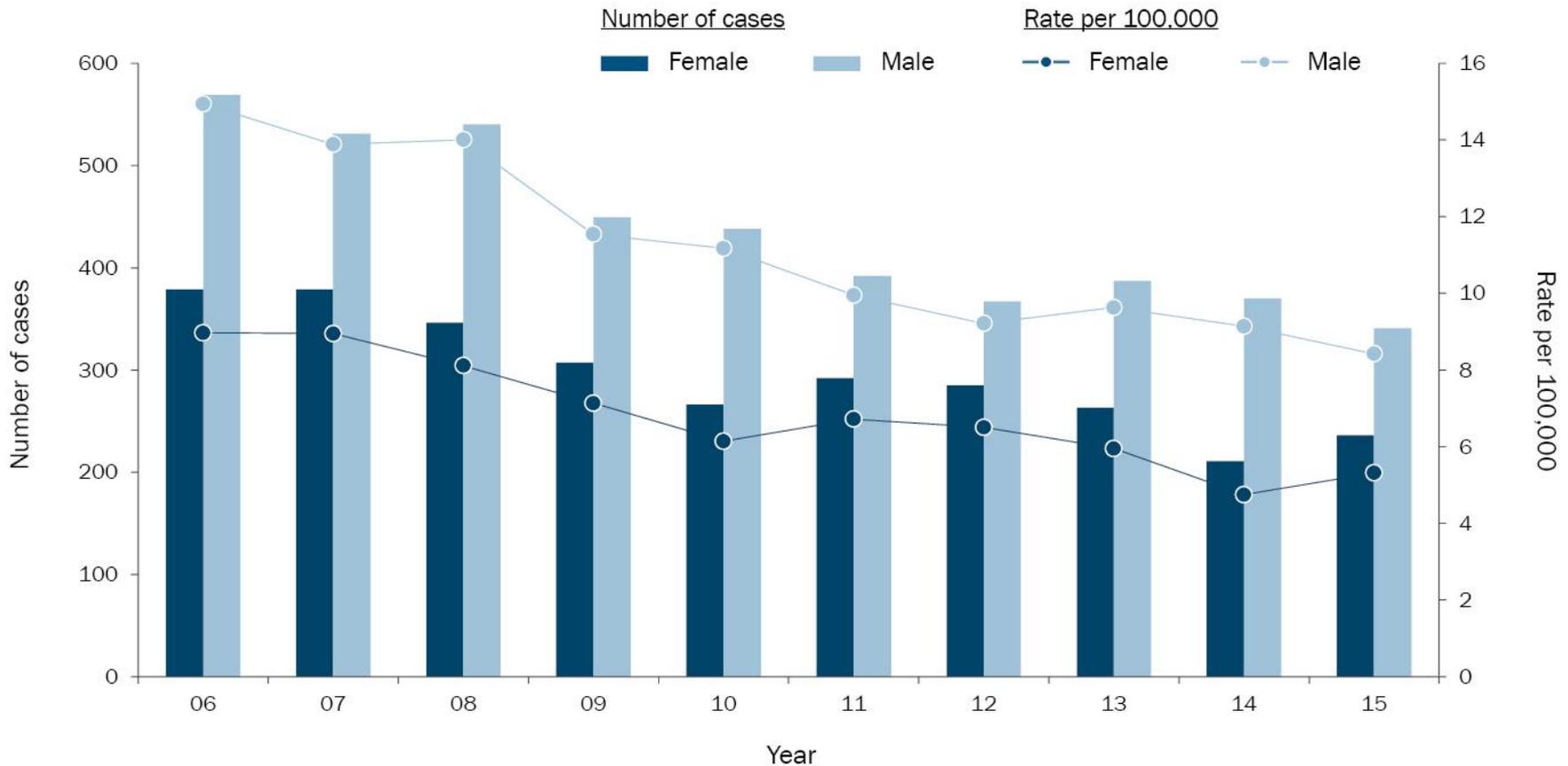
1. Rates are based on decennial Census data.

# TUBERCULOSIS RATES<sup>1</sup> BY AGE, NEW YORK CITY, 2006-2015



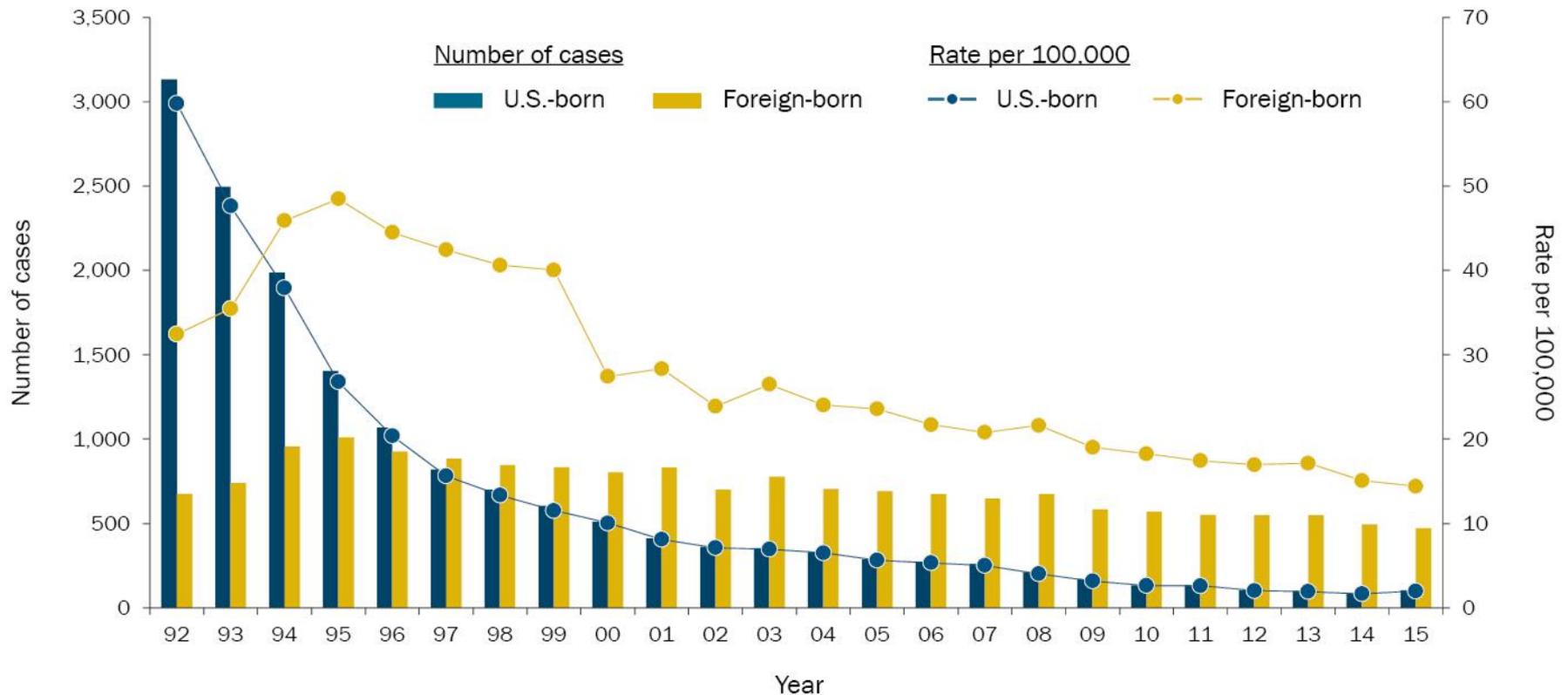
1. Rates are based on NYC DOHMH population estimates, modified from U.S. Census Bureau interpolated intercensal population estimates, 2000-2014. Updated October 2015.

# TUBERCULOSIS CASES AND RATES<sup>1</sup> BY SEX, NEW YORK CITY, 2006-2015



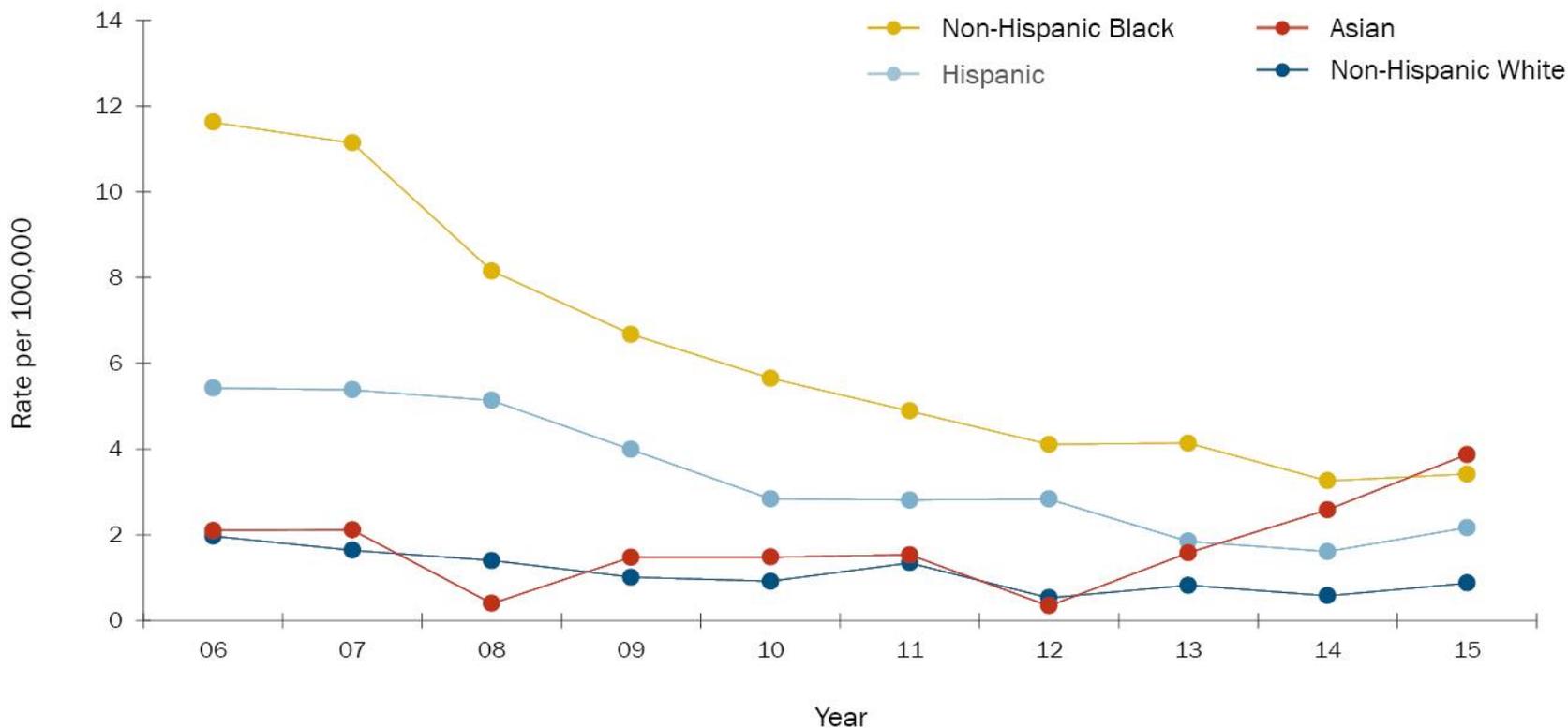
1. Rates are based on NYC DOHMH population estimates, modified from U.S. Census Bureau interpolated intercensal population estimates, 2000-2014. Updated October 2015.

# TUBERCULOSIS CASES AND RATES<sup>1</sup> BY BIRTH IN THE U.S.<sup>2</sup>, NEW YORK CITY, 1992-2015



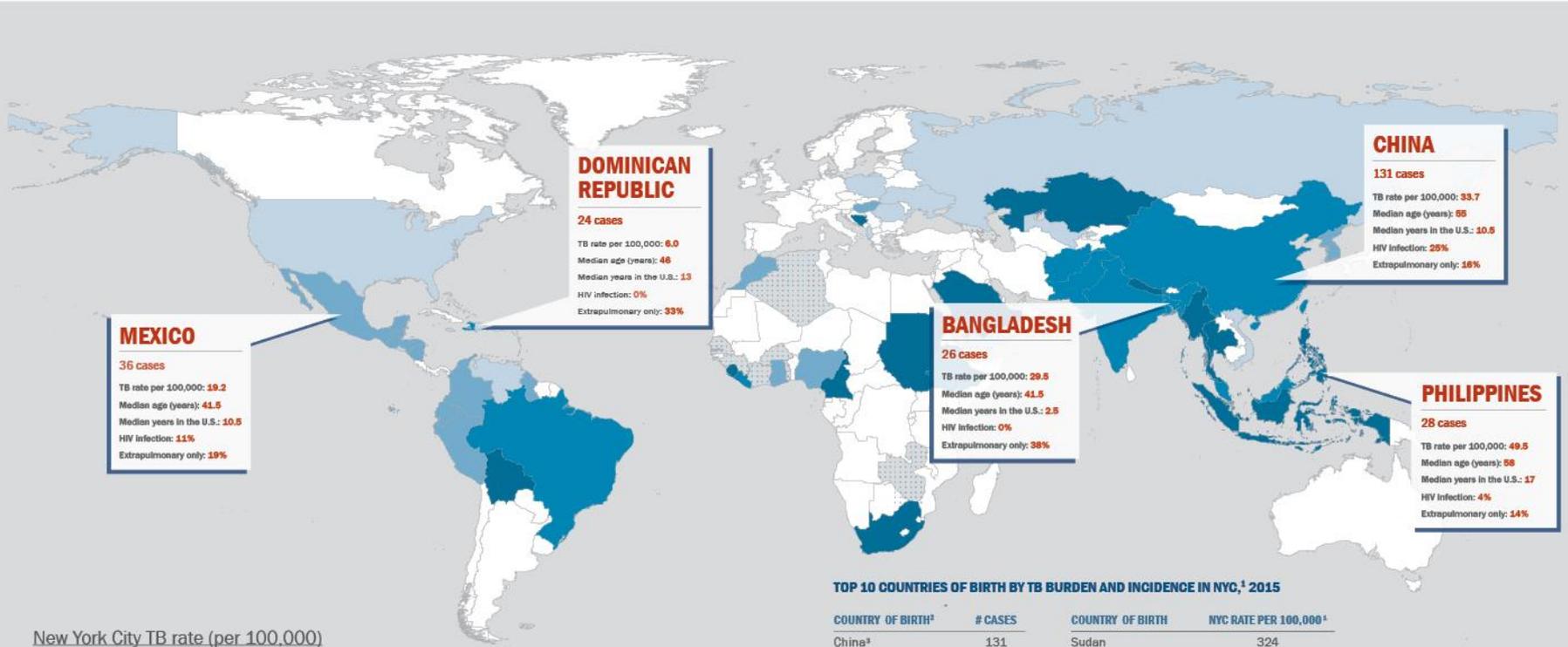
1. Rates prior to 2000 are based on 1990 U.S. Census data. Rates for 2000-2005 are based on 2000 U.S. Census data. Rates after 2005 are based on 1-year American Community Survey data for the given year or the most recent available data.
2. U.S.-born includes individuals born in the U.S. and U.S. territories.
3. Excludes cases with unknown country of birth.

# TUBERCULOSIS RATES<sup>1</sup> AMONG PERSONS BORN IN THE U.S. BY RACE/ETHNICITY, NEW YORK CITY, 2006-2015



1. Rates are based on 1-year American Community Survey Public Use Microdata Sample data for the given year or the most recent available data.
2. U.S.-born includes individuals born in the U.S. and U.S. territories.

# TUBERCULOSIS CASES AND RATES<sup>1</sup> BY COUNTRY OF BIRTH,<sup>2,3</sup> NEW YORK CITY, 2015



**MEXICO**  
36 cases  
TB rate per 100,000: **19.2**  
Median age (years): **41.5**  
Median years in the U.S.: **10.5**  
HIV infection: **11%**  
Extrapulmonary only: **19%**

**DOMINICAN REPUBLIC**  
24 cases  
TB rate per 100,000: **6.0**  
Median age (years): **46**  
Median years in the U.S.: **13**  
HIV infection: **0%**  
Extrapulmonary only: **33%**

**BANGLADESH**  
26 cases  
TB rate per 100,000: **29.5**  
Median age (years): **41.5**  
Median years in the U.S.: **2.5**  
HIV infection: **0%**  
Extrapulmonary only: **38%**

**CHINA**  
131 cases  
TB rate per 100,000: **33.7**  
Median age (years): **65**  
Median years in the U.S.: **10.5**  
HIV infection: **25%**  
Extrapulmonary only: **16%**

**PHILIPPINES**  
28 cases  
TB rate per 100,000: **49.5**  
Median age (years): **68**  
Median years in the U.S.: **17**  
HIV infection: **4%**  
Extrapulmonary only: **14%**

**TOP 10 COUNTRIES OF BIRTH BY TB BURDEN AND INCIDENCE IN NYC,<sup>1</sup> 2015**

COUNTRY OF BIRTH <sup>2</sup>	# CASES	COUNTRY OF BIRTH	NYC RATE PER 100,000 <sup>4</sup>
China <sup>3</sup>	131	Sudan	324
United States <sup>4</sup>	104	Nepal	124
Mexico	36	Cameroon	114
Philippines	28	Saudi Arabia	109
Bangladesh	26	Bolivia	83
Dominican Republic	24	Burma	82
Ecuador	22	Indonesia	78
Haiti	22	Thailand	63
India	22	Sierra Leone	53
Guyana	17	Bosnia and Herzegovina	52

1. Rates are based on 2014 American Community Survey Public Use Microdata Sample data.  
2. One case had unknown country of birth.  
3. China includes individuals born in mainland China, Hong Kong, Taiwan and Macau.  
4. U.S.-born include individuals born in the U.S. and U.S. territories.

New York City TB rate (per 100,000)



**70** Number of countries of birth represented among TB patients in 2015

**64%** Proportion of foreign-born patients residing in the U.S. for more than 5 years at time of TB diagnosis

**14.4** TB rate per 100,000 among people born outside of the U.S.

# TOP TEN COUNTRIES OF BIRTH BY TUBERCULOSIS BURDEN AND INCIDENCE,<sup>1</sup> NEW YORK CITY, 2015

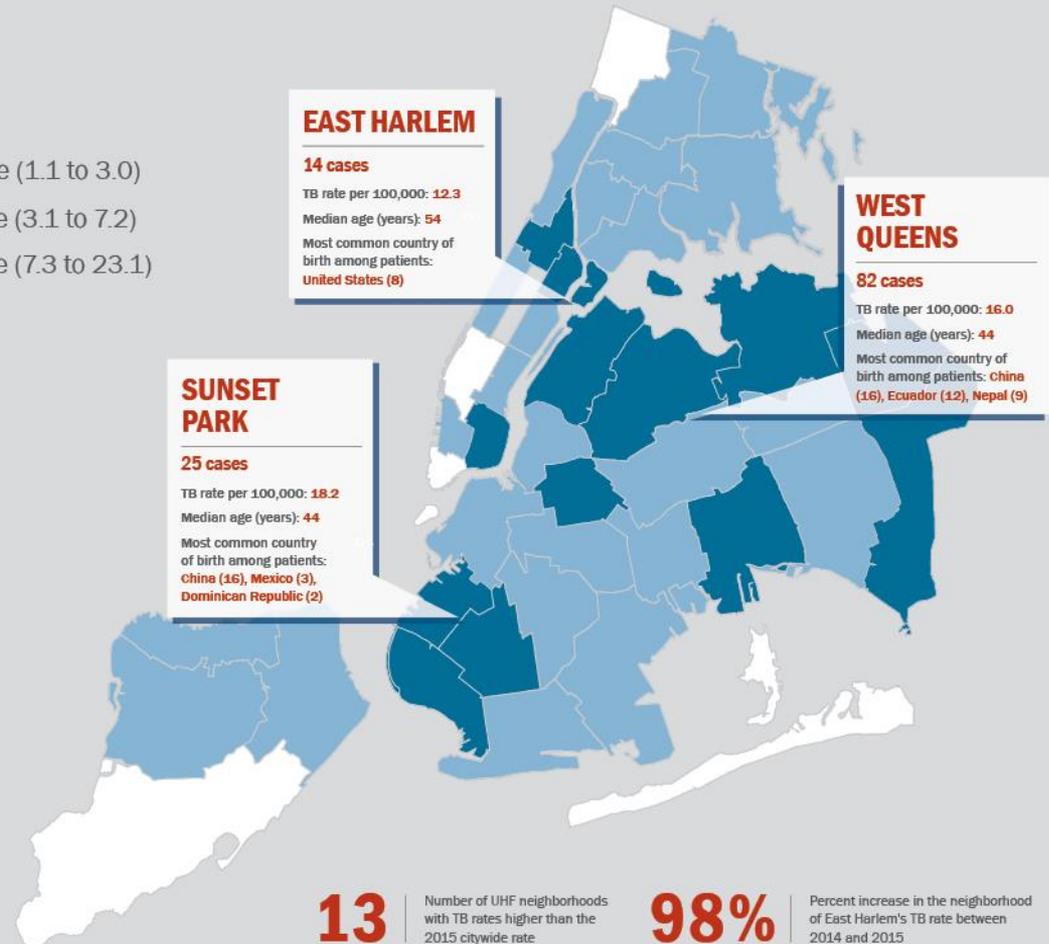
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# TUBERCULOSIS RATES<sup>1</sup> BY UNITED HOSPITAL FUND NEIGHBORHOOD, NEW YORK CITY, 2015

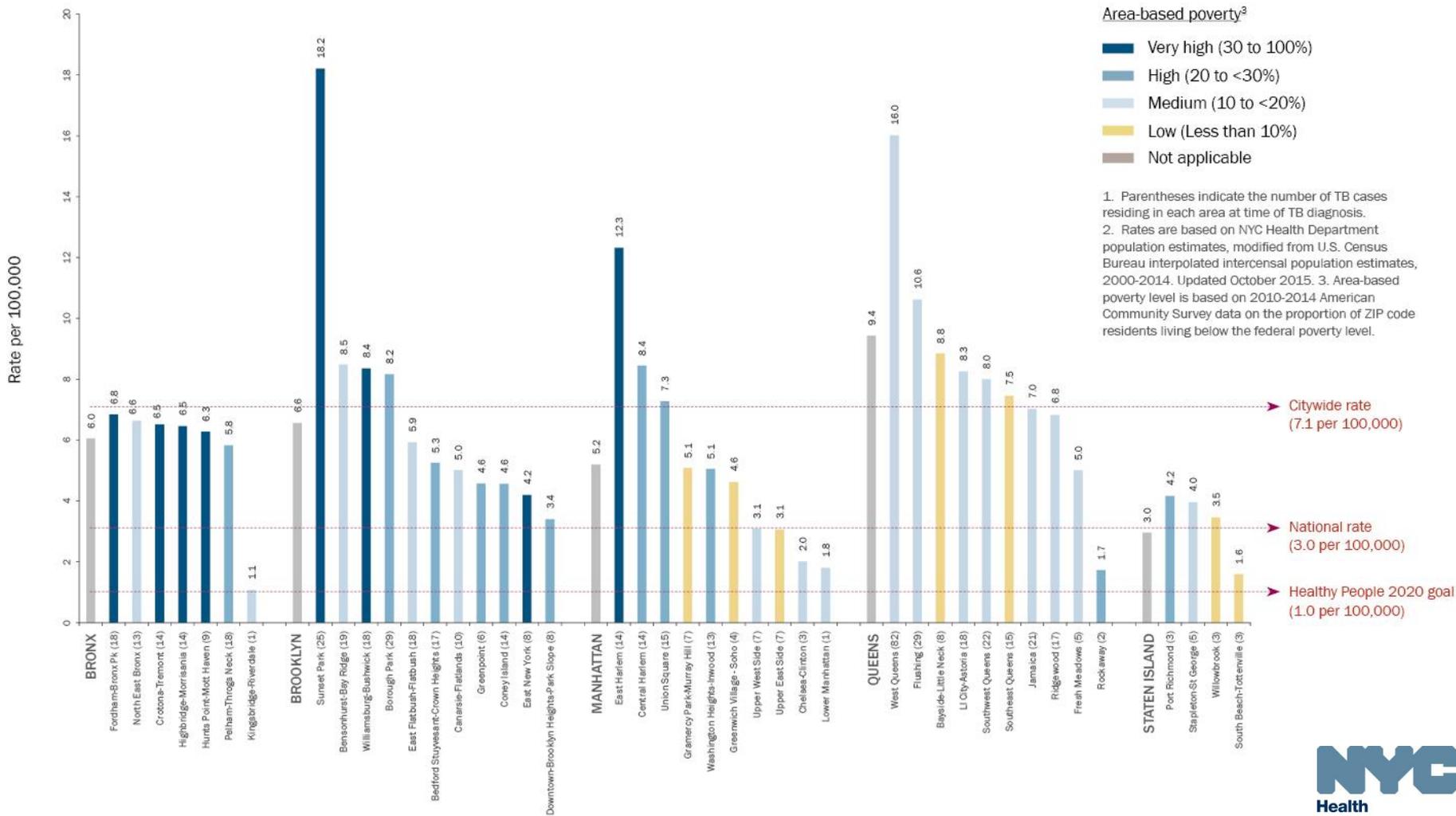
Rate per 100,000

- Below national rate (1.1 to 3.0)
- Below citywide rate (3.1 to 7.2)
- Above citywide rate (7.3 to 23.1)

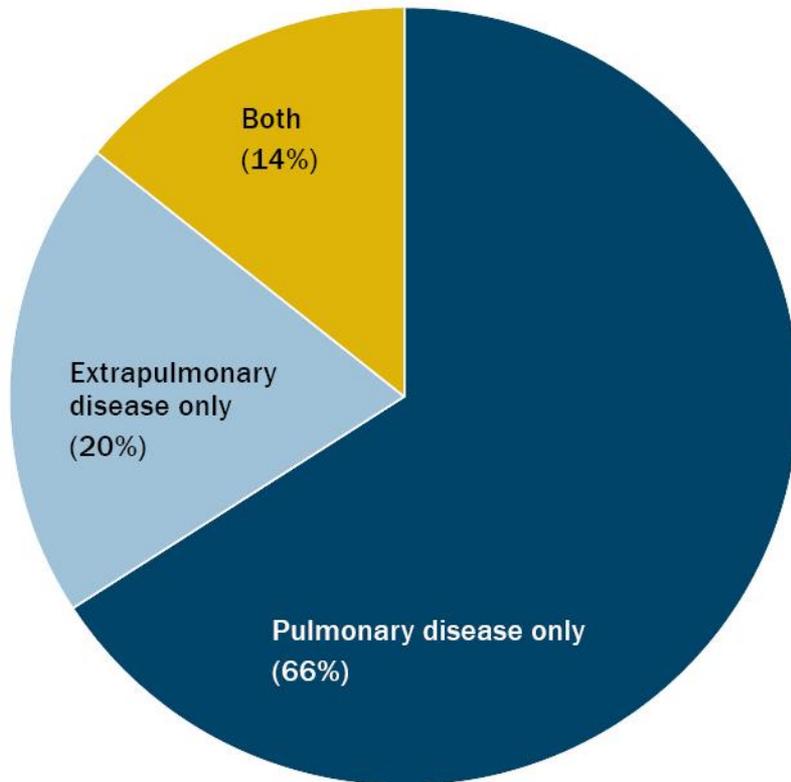


1. Rates are based on NYC Health Department population estimates, modified from U.S. Census Bureau interpolated intercensal population estimates, 2000-2014. Updated October 2015.

# TUBERCULOSIS RATES<sup>2</sup> BY UNITED HOSPITAL FUND NEIGHBORHOOD AND AREA-BASED POVERTY,<sup>3</sup> NEW YORK CITY, 2015



# TUBERCULOSIS CASES BY DISEASE SITE, NEW YORK CITY, 2015 (N=577)

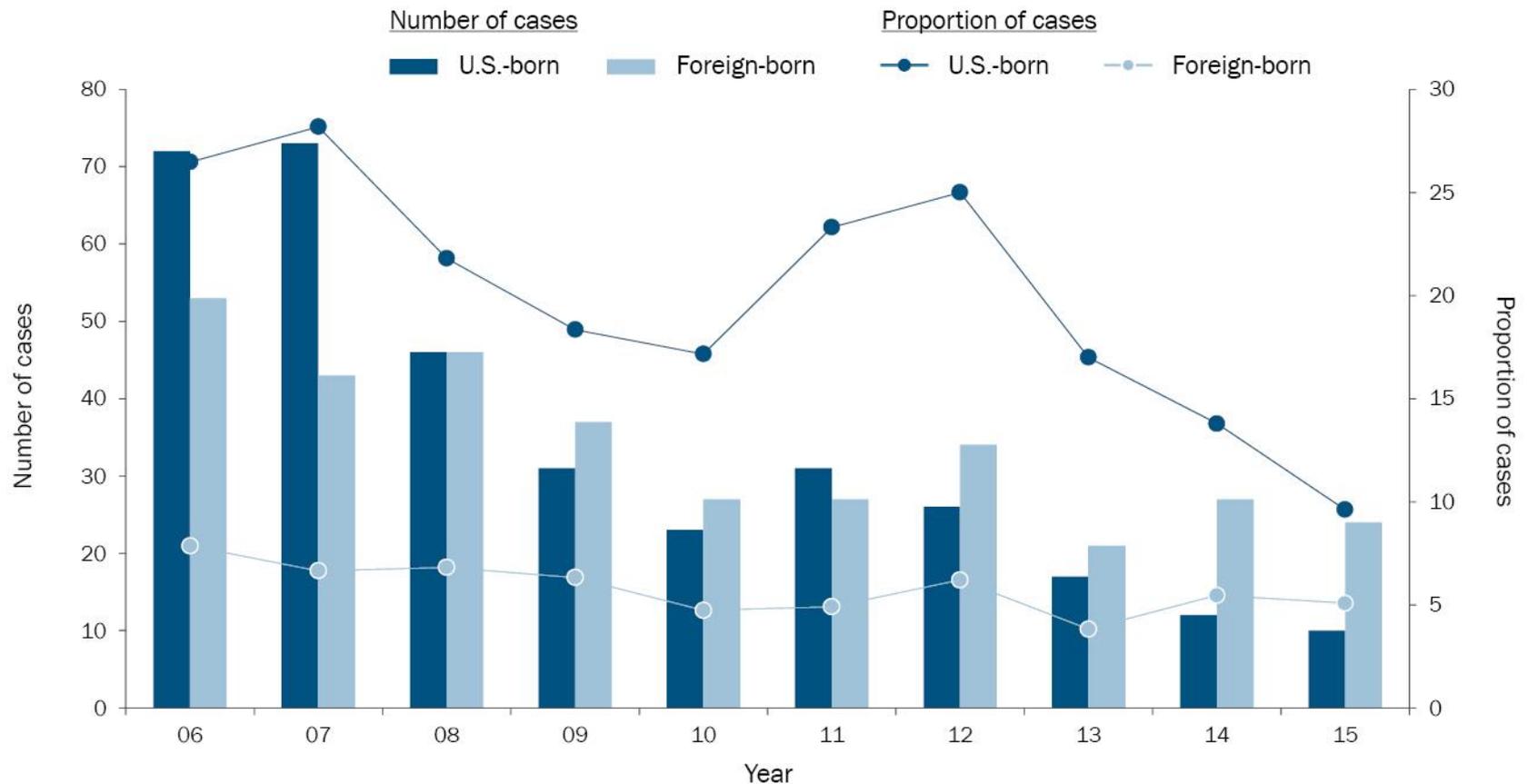


Disease site<sup>1</sup> among tuberculosis cases with any extrapulmonary disease, New York City, 2015 (n=197)

Disease site	Number	Percent
Any extrapulmonary	197	-
Lymphatic	82	42
Pleural	60	30
Bone/joint	24	12
Meningeal	11	6
Genitourinary	8	4
Peritoneal	12	6
Laryngeal	2	1
Other	30	15

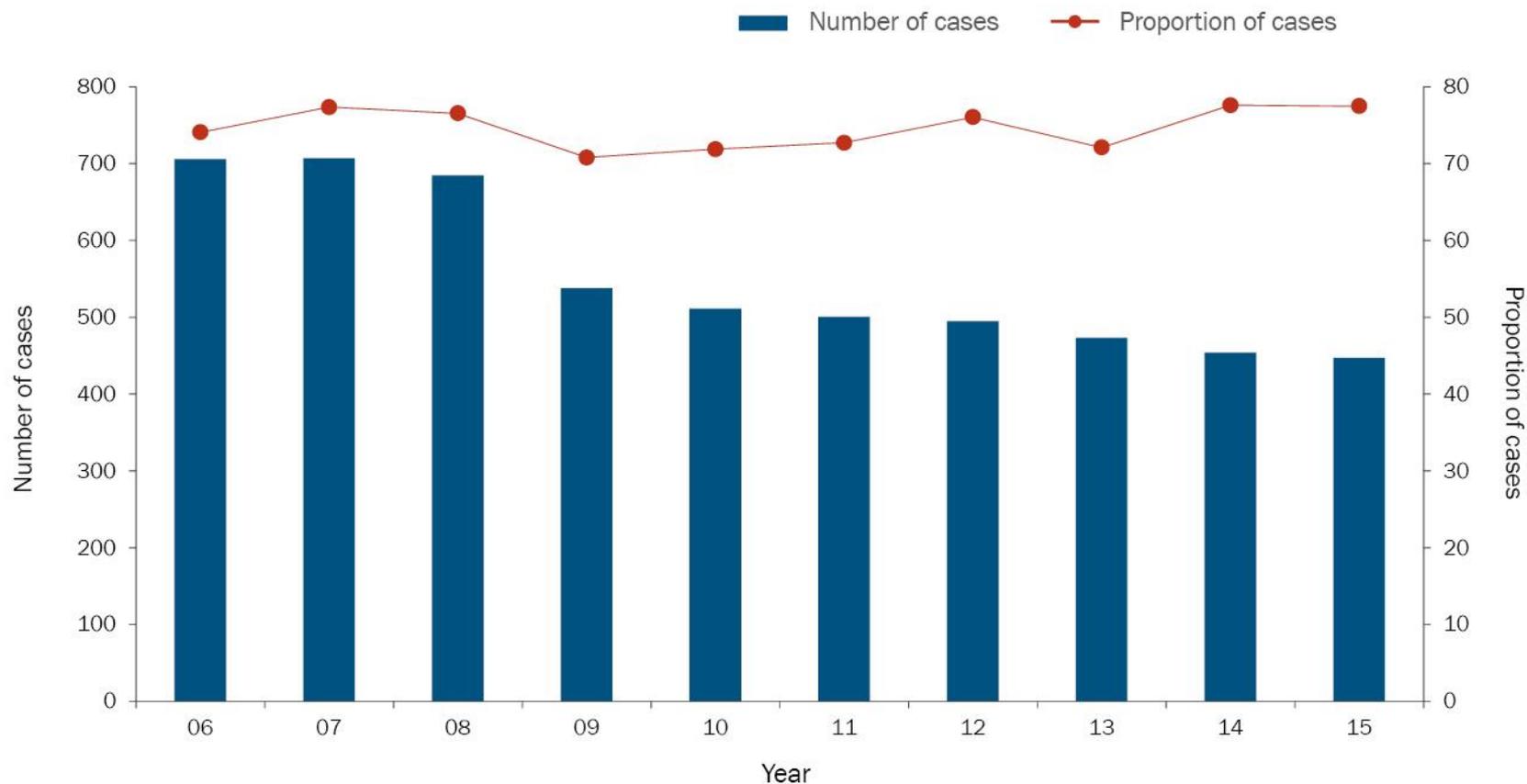
1. Categories are not mutually exclusive.

# HUMAN IMMUNODEFICIENCY VIRUS (HIV) INFECTION AMONG TUBERCULOSIS CASES BY BIRTH IN THE UNITED STATES,<sup>1,2</sup> NEW YORK CITY, 2006-2015

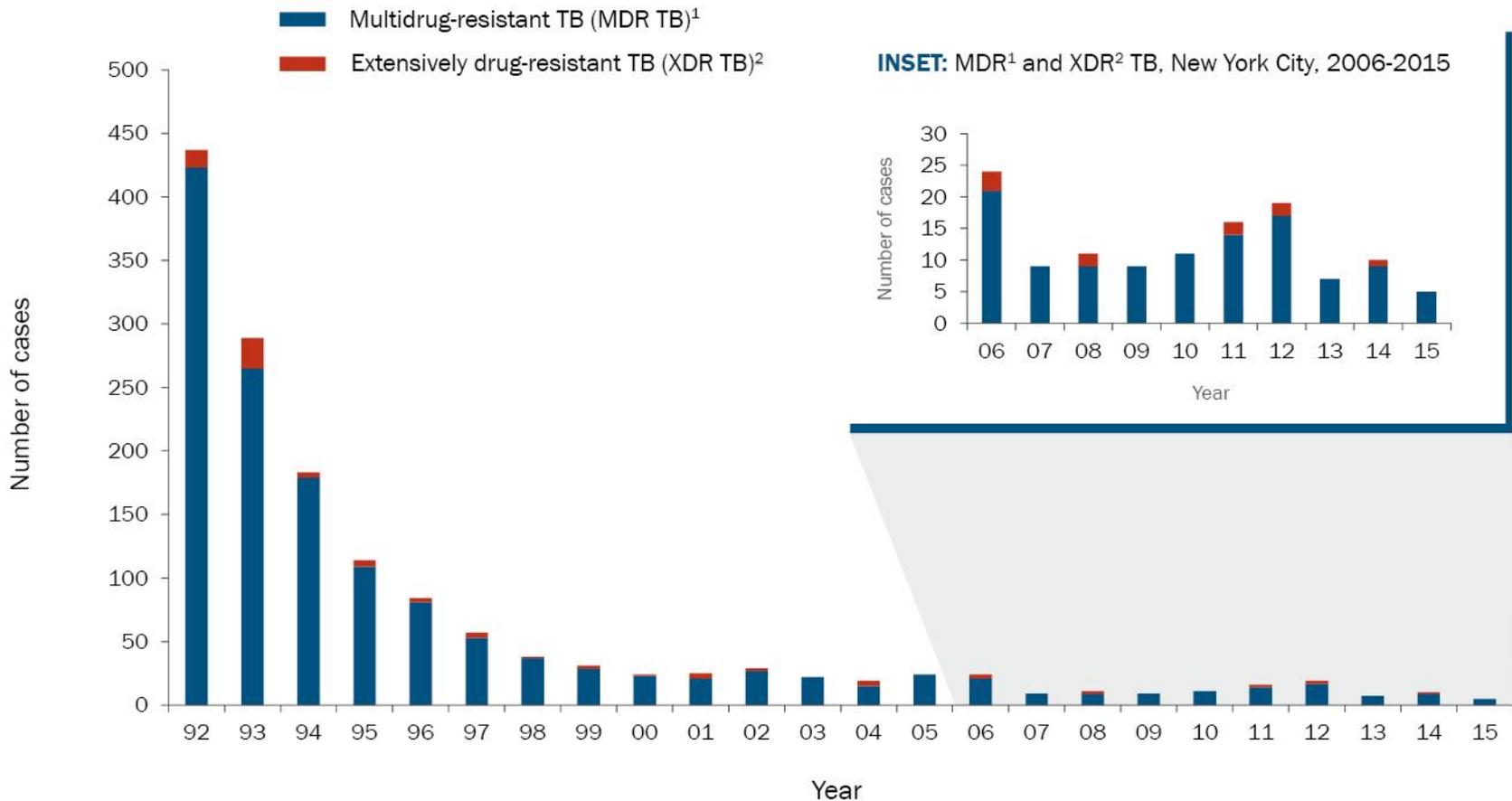


1. U.S.-born includes individuals born in the U.S. and U.S. territories. 2. Excludes cases with unknown country of birth.

# NUMBER AND PROPORTION OF CULTURE-CONFIRMED TUBERCULOSIS (TB) CASES AMONG ALL TB CASES, NEW YORK CITY, 2006-2015

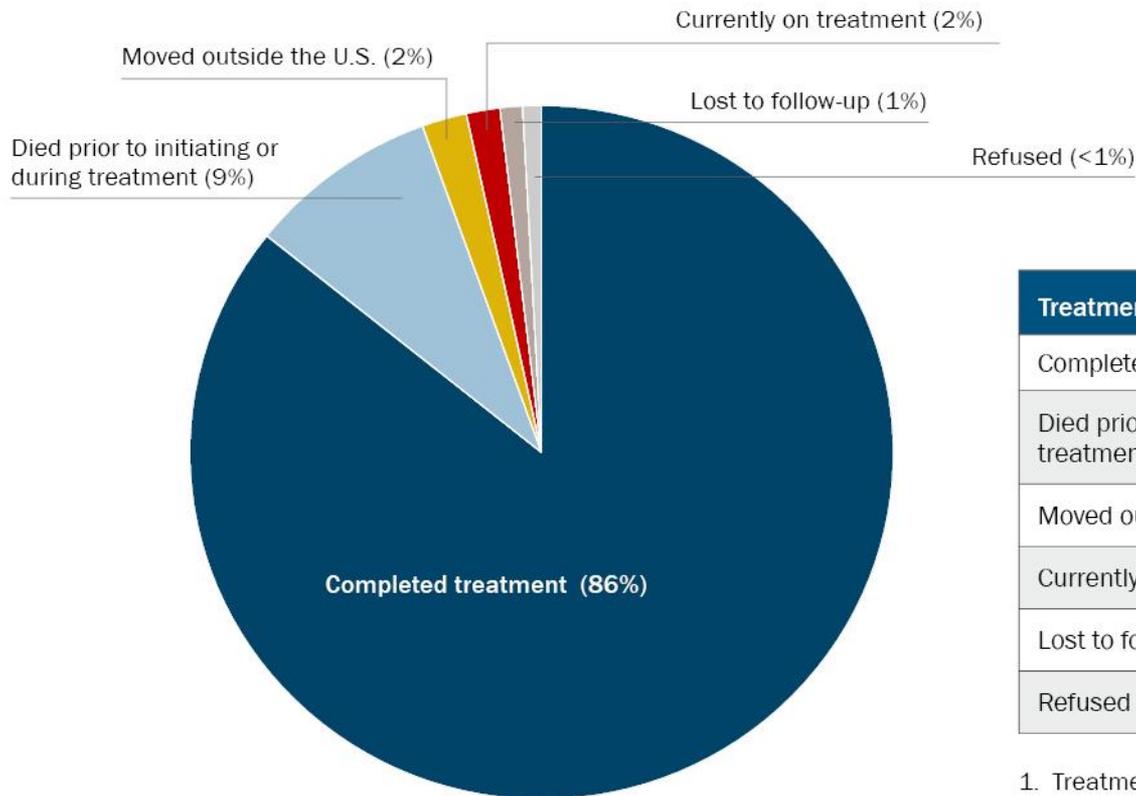


# MULTIDRUG RESISTANCE<sup>1</sup> AMONG TUBERCULOSIS CASES, NEW YORK CITY, 1992-2015



1. Multidrug-resistant (MDR) TB is defined as resistance to at least isoniazid and rifampin. 2. Extensively drug-resistant (XDR) TB is defined as resistance to at least isoniazid and rifampin plus a fluoroquinolone and a second-line injectable anti-TB medication.

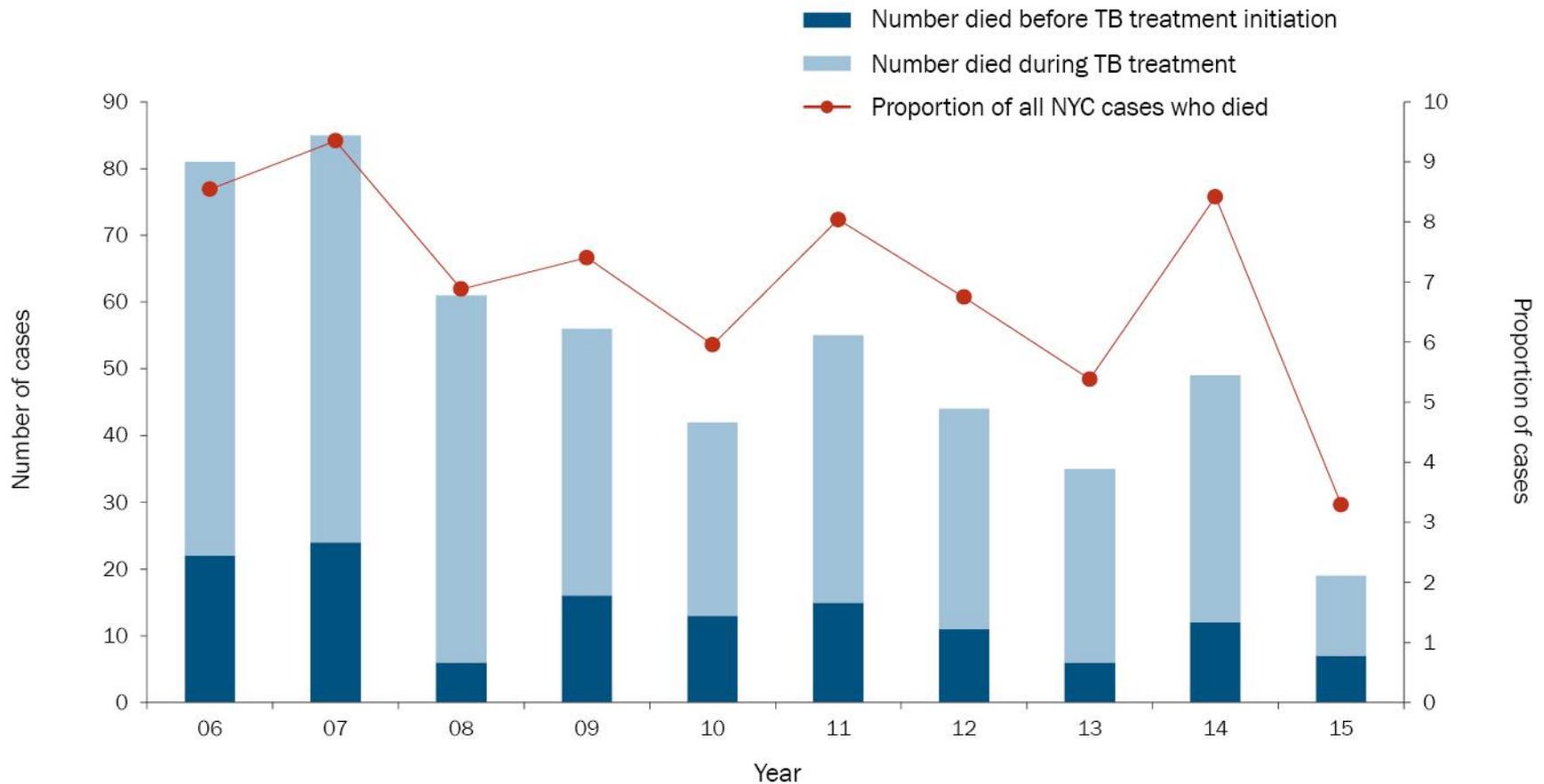
# TREATMENT OUTCOMES FOR TUBERCULOSIS CASES COUNTED IN 2014<sup>1</sup> WHO WERE ELIGIBLE TO COMPLETE TREATMENT WITHIN 365 DAYS,<sup>2</sup> NEW YORK CITY (N=582)



Treatment outcome <sup>1</sup>	Number	Percent
Completed treatment	499	86
Died prior to initiating or during treatment	51	9
Moved outside of the U.S.	12	2
Currently on treatment	9	2
Lost to follow-up	6	1
Refused	5	<1

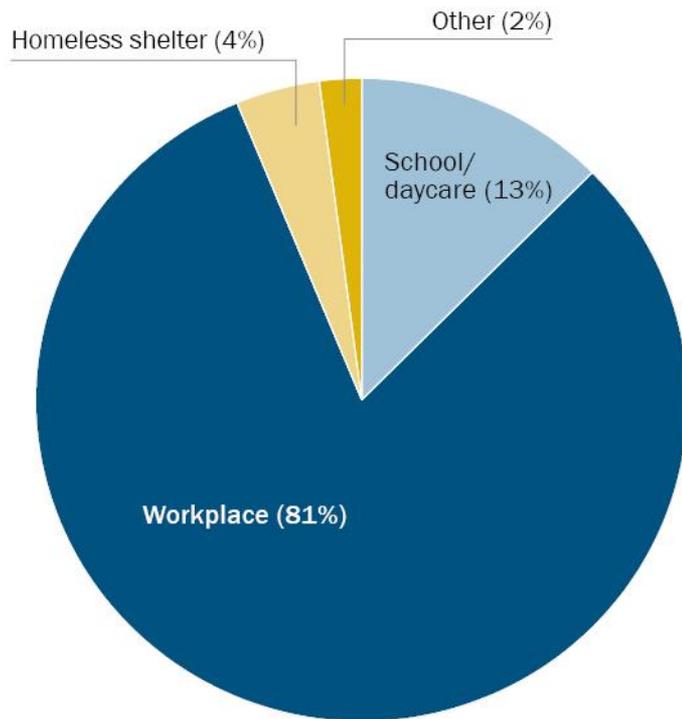
1. Treatment outcomes are not reported for the current year to allow sufficient time for follow-up.

# MULTIDRUG RESISTANCE<sup>1</sup> AMONG TUBERCULOSIS CASES, NEW YORK CITY, 1992-2015



1. A death is defined as any patient who died prior to or during TB treatment, regardless of the cause of death. This excludes any patient who died after the completion of TB treatment.

# EPIDEMIOLOGIC INVESTIGATIONS IN NON-HOUSEHOLD SETTINGS<sup>1</sup> BY SITE TYPE, NUMBER OF EXPOSED CONTACTS AND TRANSMISSION ASSESSMENT, NEW YORK CITY, 2015 (N=48)

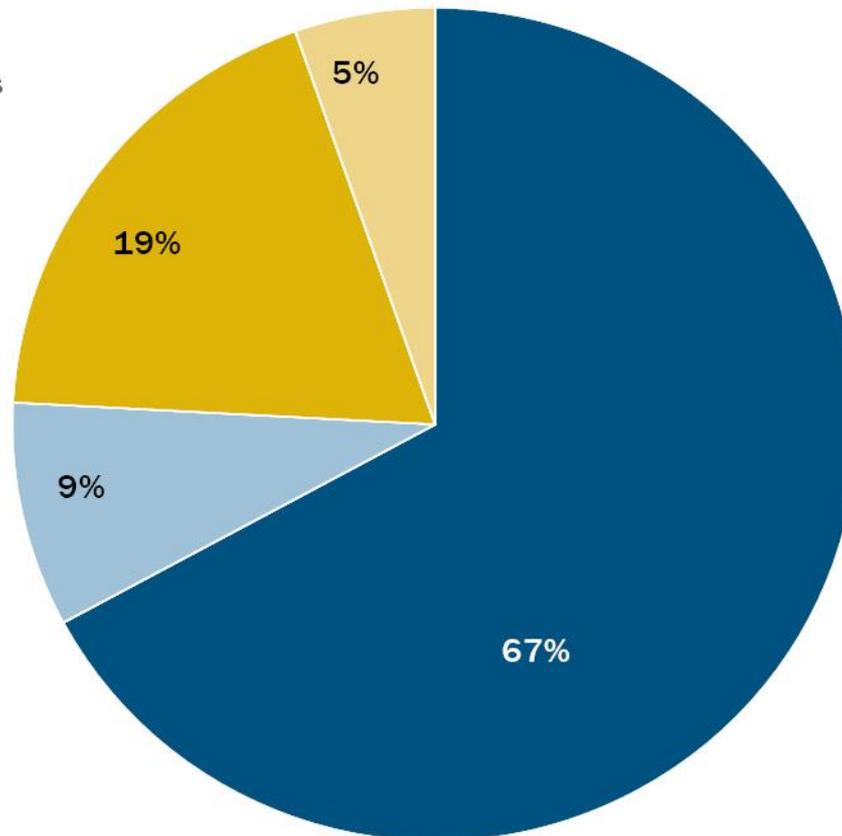


	≥15 exposed contacts	<15 exposed contacts	Total
Number of sites	18	30	48
Transmission likely <sup>2</sup>	4 (24%)	5 (19%)	9 (21%)
Number of contacts	1,133	204	1,337
Contacts eligible for testing <sup>3</sup>	1,091 (96%)	192 (94%)	1,283 (96%)
Contacts tested	847 (78%)	173 (90%)	1,020 (80%)
Contacts with a positive TB test result	42 (5%)	22 (13%)	64 (6%)

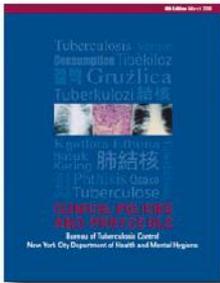
1. Excludes health care-associated investigations (n=149).
2. Proportion calculated among investigations where transmission could be assessed.
3. Contacts eligible for testing are defined as contacts without a known history of TB disease or documented positive test for TB infection who were alive subsequent to the diagnosis of the infectious TB case to whom they were exposed.

# EPIDEMIOLOGIC INVESTIGATIONS IN HEALTH CARE SETTINGS BY SITE TYPE, NEW YORK CITY, 2015 (N=149)

- Acute care facility
- Long-term care facility
- Home health care services
- Outpatient setting



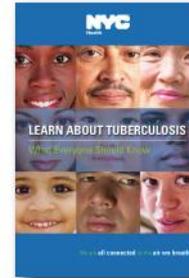
# TB EDUCATIONAL RESOURCES FOR HEALTH CARE PROVIDERS AND THE PUBLIC



## CLINICAL POLICIES AND PROTOCOLS

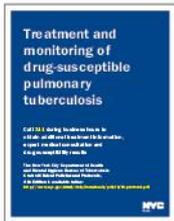
4th Edition.

Describes policies, protocols and recommendations for the prevention, treatment and control of TB



## PATIENT BROCHURE

*Learn About Tuberculosis: What Everyone Should Know*  
General information in easy-to-read format for all audiences. Available in English, Spanish, Chinese, Korean, French and Haitian Creole



## POCKET-SIZED REFERENCE GUIDE FOR PROVIDERS

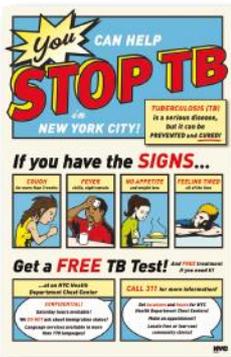
*Treatment and monitoring of drug-susceptible pulmonary tuberculosis*

Provides concise information about treatment and monitoring for pulmonary TB



## TB EPIQUERY

Data on TB cases reported to the BTBC from 2001 to 2012 are now available on TB EpiQuery. EpiQuery is an interactive, user-friendly system designed to guide users through basic data analyses. Reported TB cases and case rates are available by select demographic and geographic characteristics. On a citywide level, select characteristics that are important to the epidemiology of TB are also available, including country of birth and HIV infection. To access TB EpiQuery, go to: <http://nyc.gov/health/epiquery>



## EDUCATIONAL POSTER

Provides basic TB information and includes illustrations with captions. Available in English, Spanish, French, Haitian Creole, Hindi, Urdu, Bengali, Tibetan, Tagalog and Chinese.

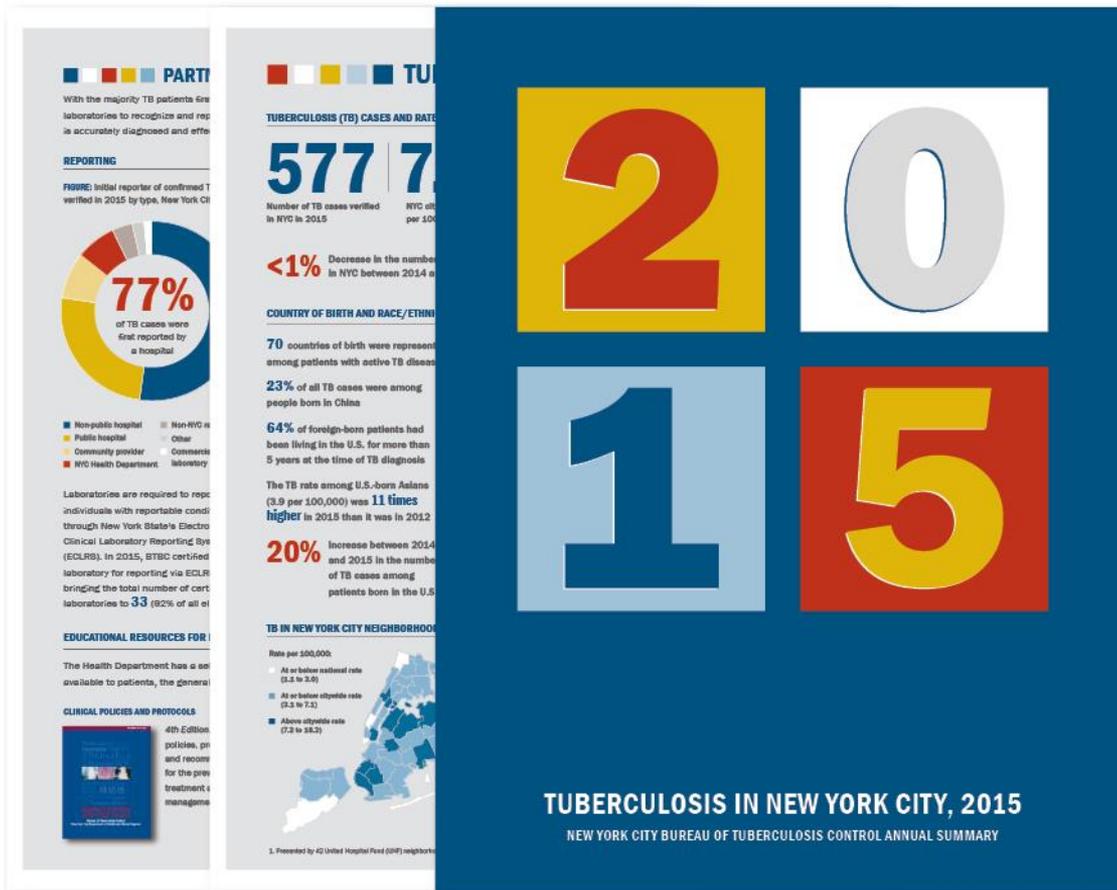
To request information or posters in hard copy or digital formats, please email [tbtraining@health.nyc.gov](mailto:tbtraining@health.nyc.gov)



## NYC HEALTH EPI DATA BRIEFS:

Epi Data Briefs are short publications that highlight data findings from varying Health Department programs and projects. For more information and to access recently-published reports, go to: <http://www.nyc.gov/html/doh/html/data/epidata.shtml>

# INFOGRAPHICS AND HARD COPIES OF THE ANNUAL TB SUMMARY ARE AVAILABLE



Please email:

[tb-epi@health.nyc.gov](mailto:tb-epi@health.nyc.gov)

# NEW YORK CITY HEALTH DEPARTMENT CHEST CENTERS

## THE HEALTH DEPARTMENT PROVIDES AN ARRAY OF TB DIAGNOSTIC SERVICES INCLUDING:

- Testing for latent TB infection using the latest generation blood-based QuantiFERON®-TB Gold test and tuberculin skin tests
- Sputum induction
- Chest radiographs
- Medical evaluation
- Treatment for TB disease and latent TB infection
- Directly Observed Therapy (DOT) services, including video-based DOT

## ADDITIONAL CLINICAL SERVICES PROVIDED AT EACH CHEST CENTER INCLUDE:

- Outpatient medical and nursing care
- Phlebotomy services
- Social services referrals
- Human immunodeficiency virus (HIV) education and testing regardless of person's need for TB care
- TB evaluation for newly arrived immigrants and refugees referred by the Centers for Disease Control and Prevention

### WASHINGTON HEIGHTS

600 West 168th Street, Third Floor  
New York, NY 10032

212-368-4500 or 212-690-1348

### MORRISANIA

1309 Fulton Avenue,  
First Floor  
Bronx, NY 10456

718-579-4157

### FORT GREENE

295 Flatbush Avenue Extension,  
Fourth Floor  
Brooklyn, NY 11201

718-643-8357 or  
718-643-6551/4808

### CORONA

34-33 Junction Blvd,  
Second Floor  
Queens, NY 11372

718-476-7635 or  
718-476-7636

