



The Changing Landscape of TB: Maryland TB in 2013 Presented by Dr. David Blythe

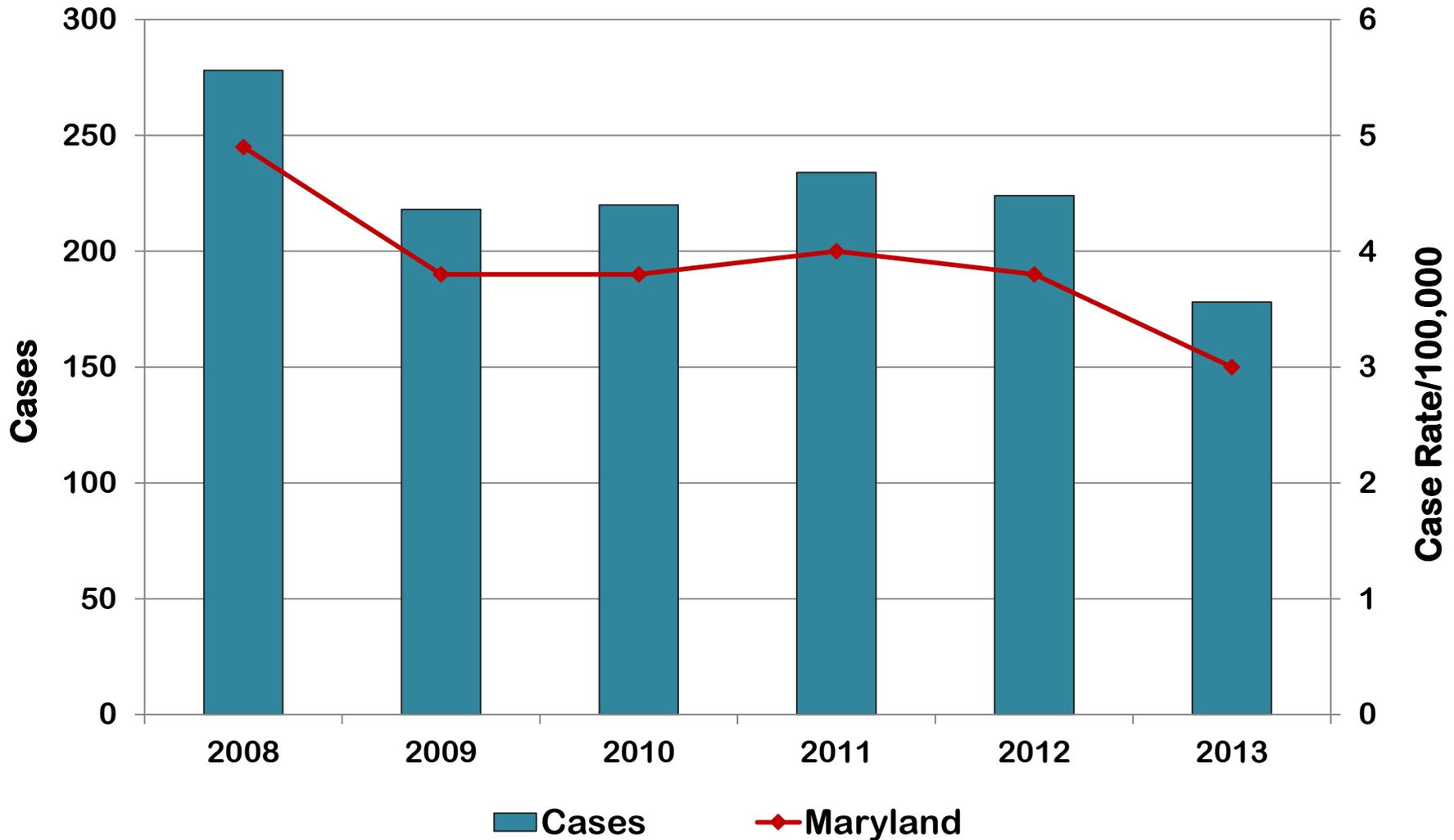
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**TB Annual Meeting
March 20, 2014**

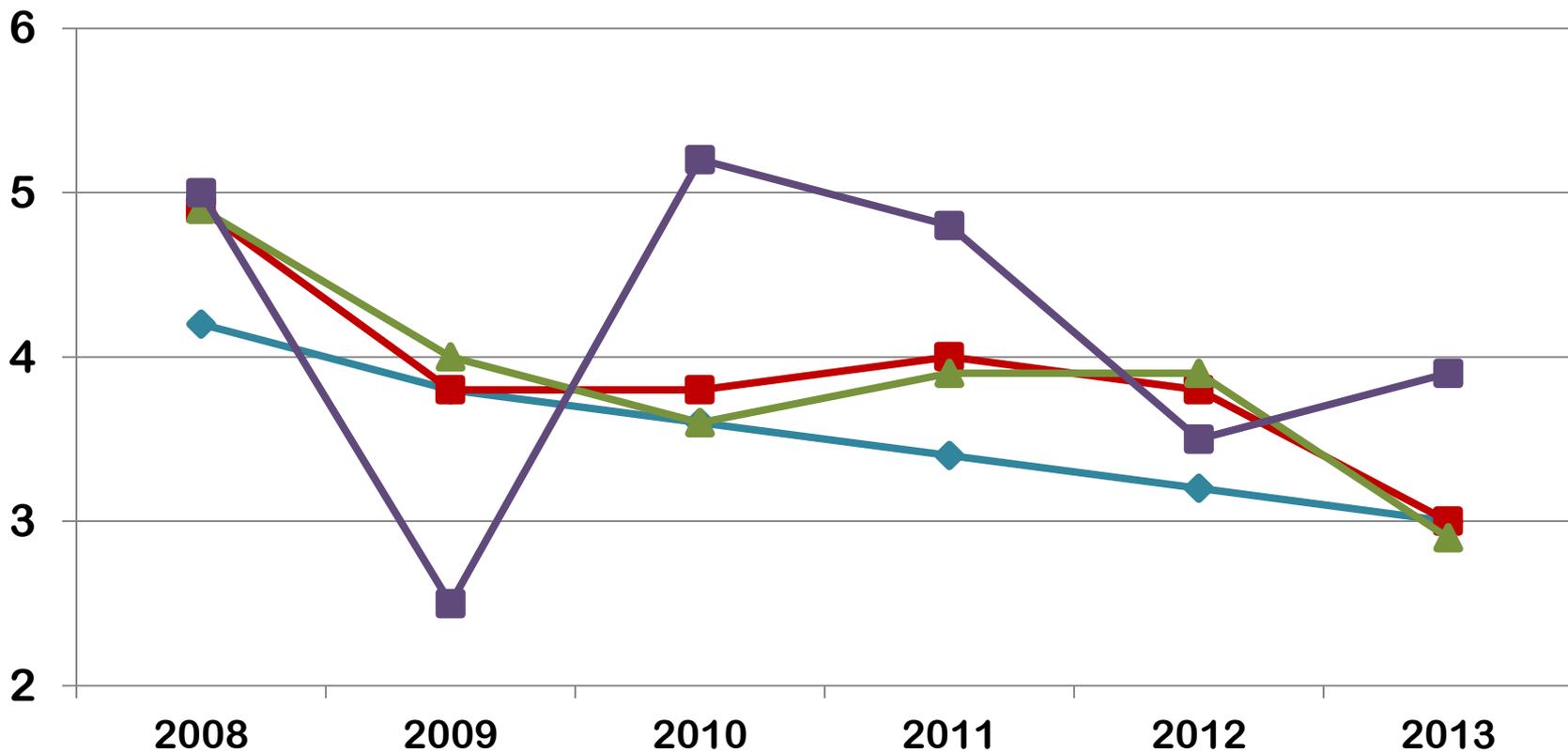
Presentation Outline

- Maryland TB Epidemiology (2013)
 - Maryland TB numbers and trends
 - Country of Origin
 - Race
 - Age
 - Drug Resistance
 - Risk Factors

Maryland TB, 2008-2013



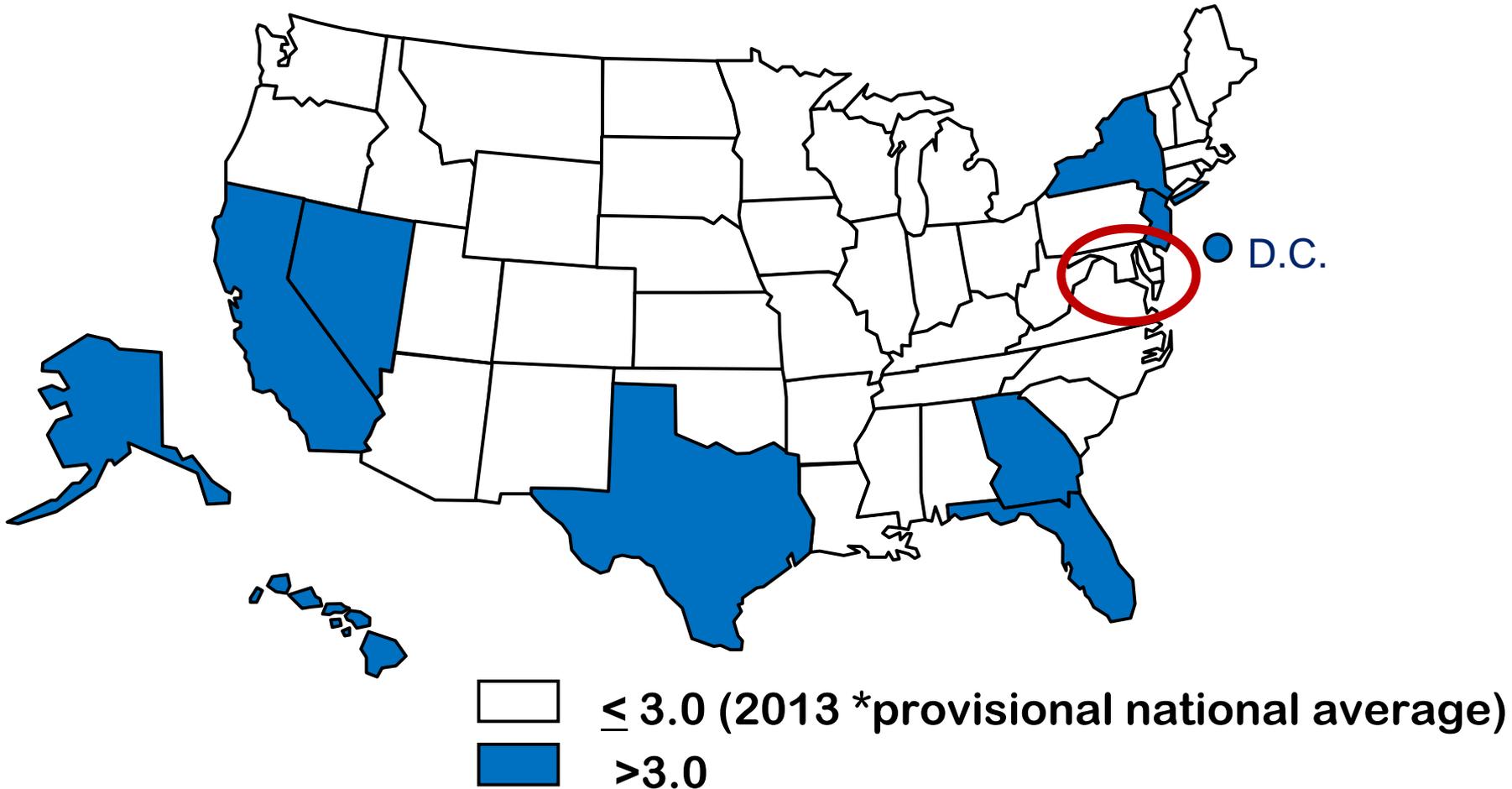
TB Case Rates, 2008-2013



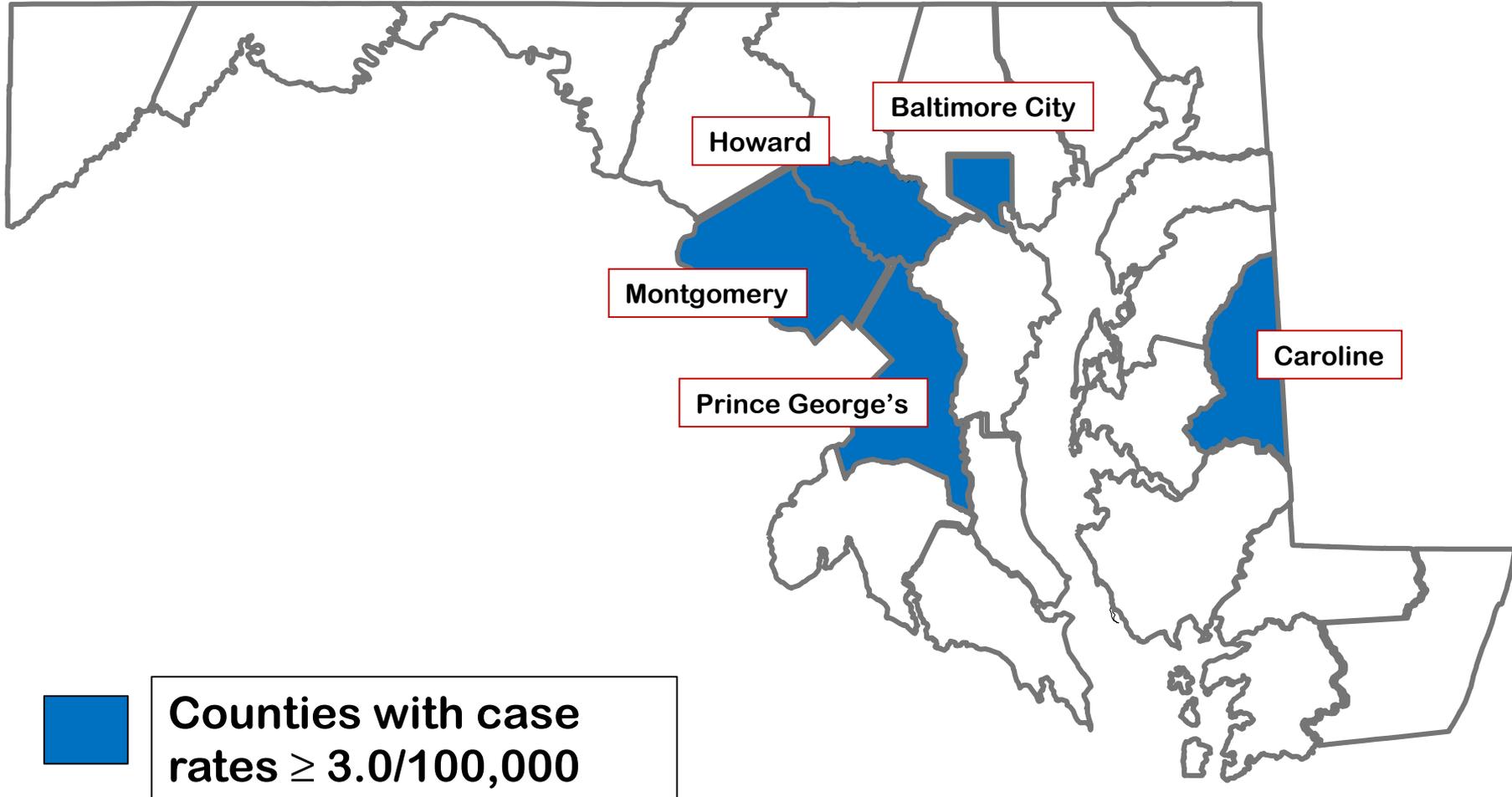
◆ National ■ Maryland ▲ Counties Only* ■ Baltimore City

*Excluding Baltimore City

TB Case Rates per 100,000, United States, 2013*



Maryland TB Case Rates, by Jurisdiction, 2013



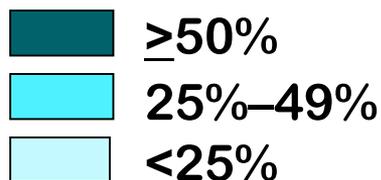
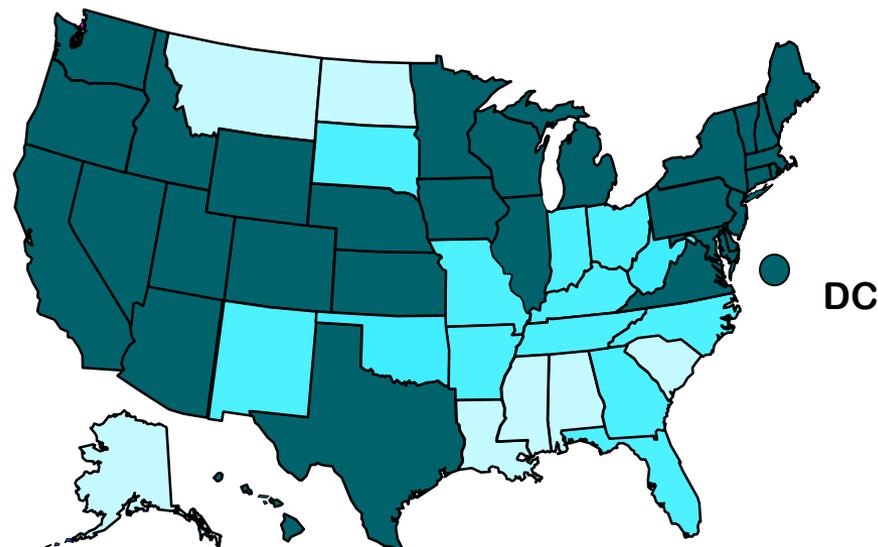
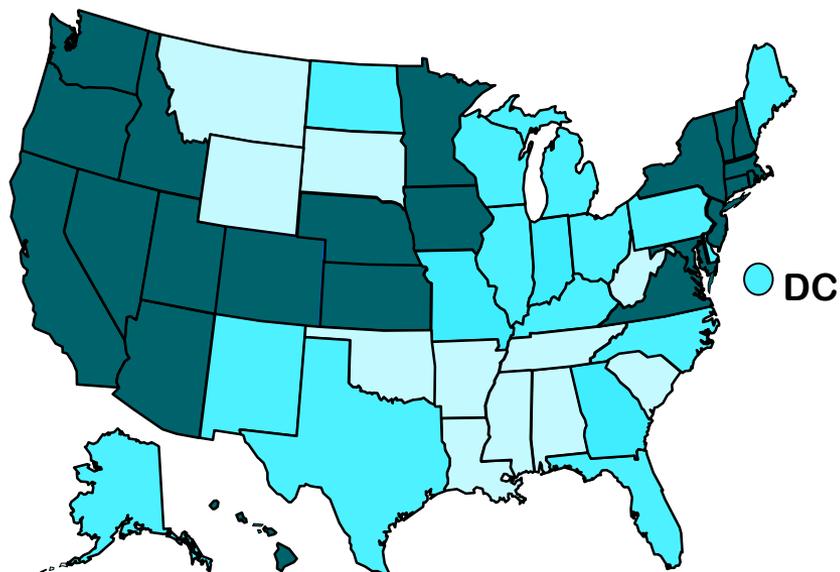
TB Characteristics, 2013

- Pulmonary
 - 100 cases (56%)
- Extrapulmonary
 - 62 cases (35%)
 - Extrapulmonary disease is seen more often in persons born outside of the U.S.
- Both pulmonary and extrapulmonary
 - 16 cases (9%)

Percentage of TB Cases Among Foreign-born Persons, United States*

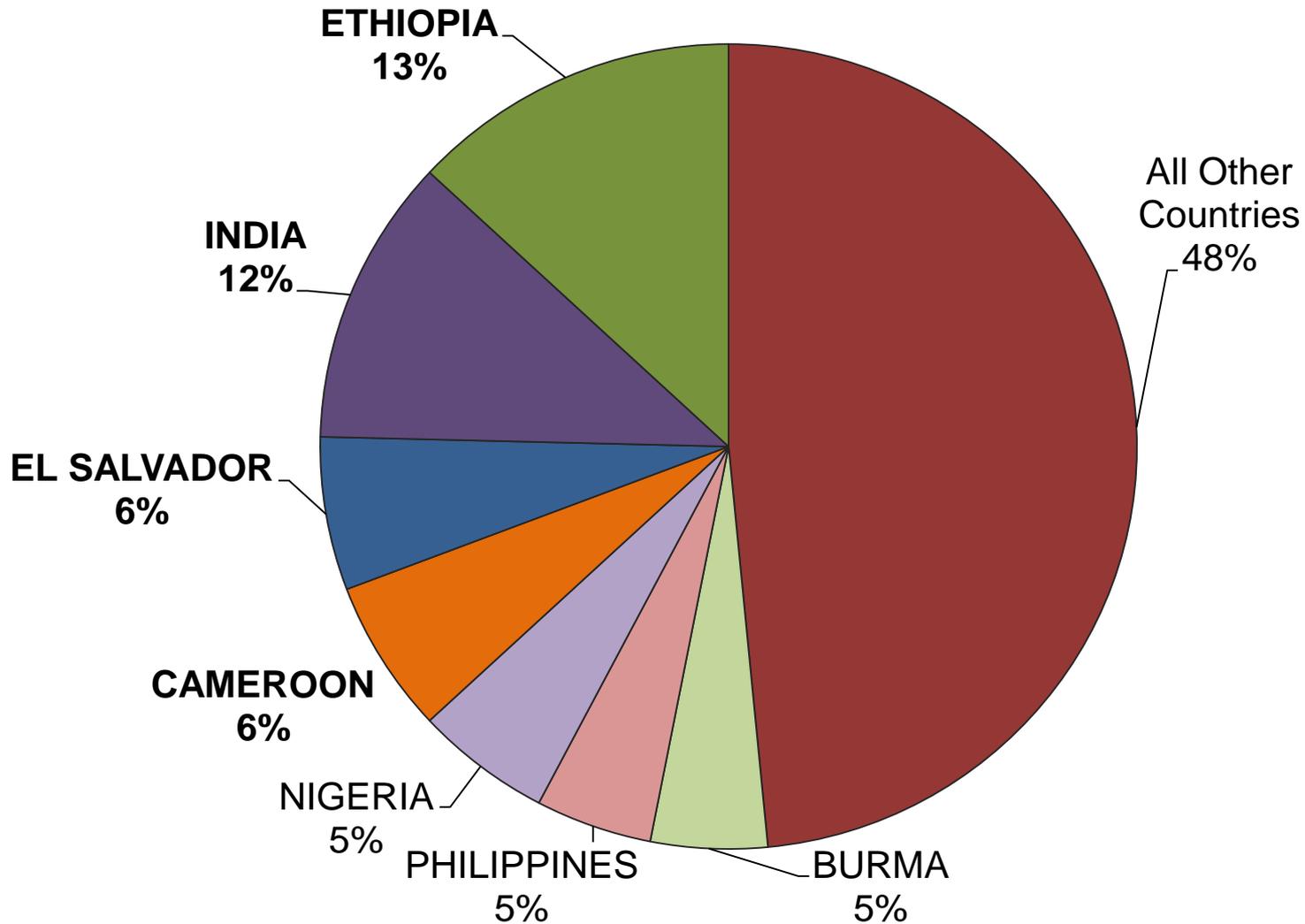
2002

2012



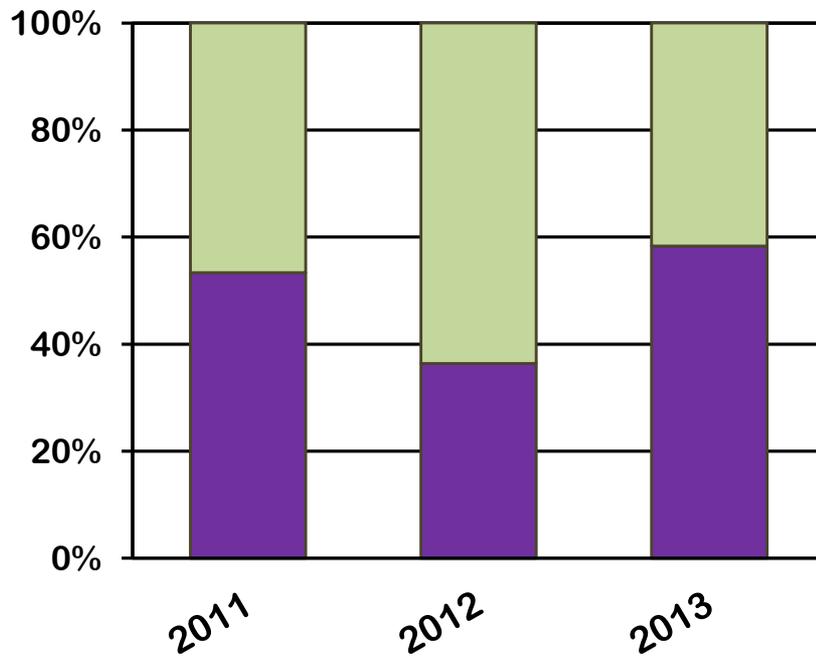
CDC, *Updated as of June 10, 2013

Country of Origin-Maryland, 2013

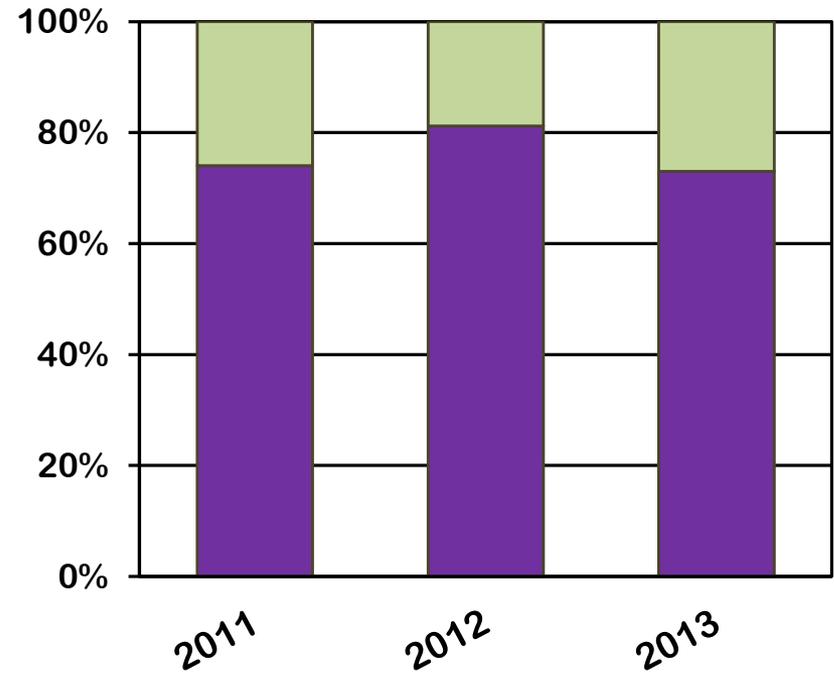


Percent of TB cases by Origin, Maryland, 2011-2013

Baltimore City



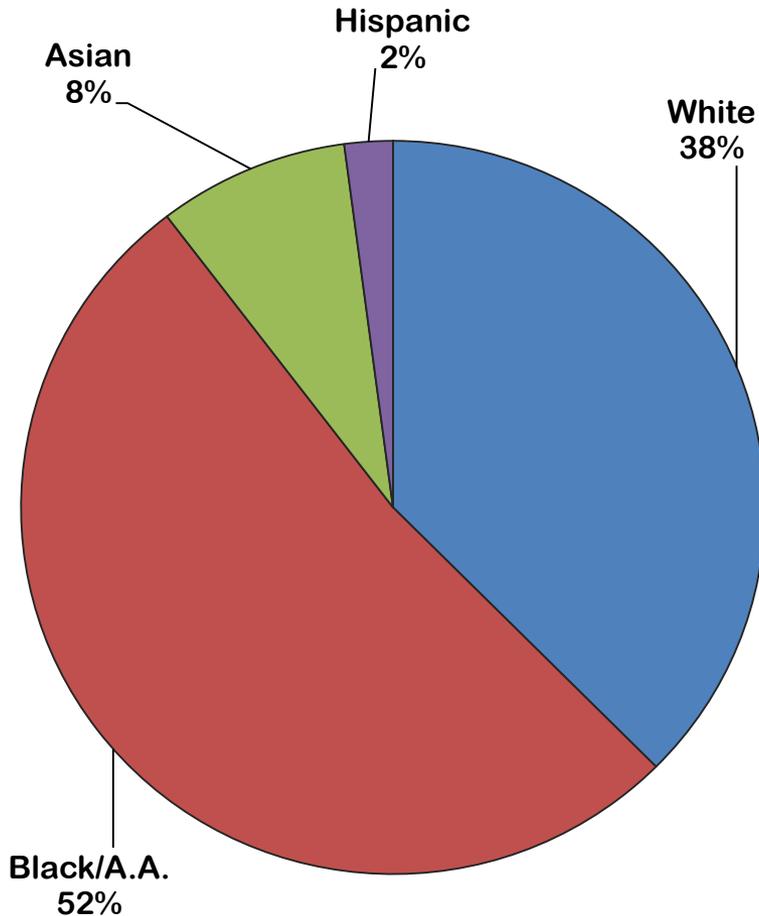
Maryland Counties



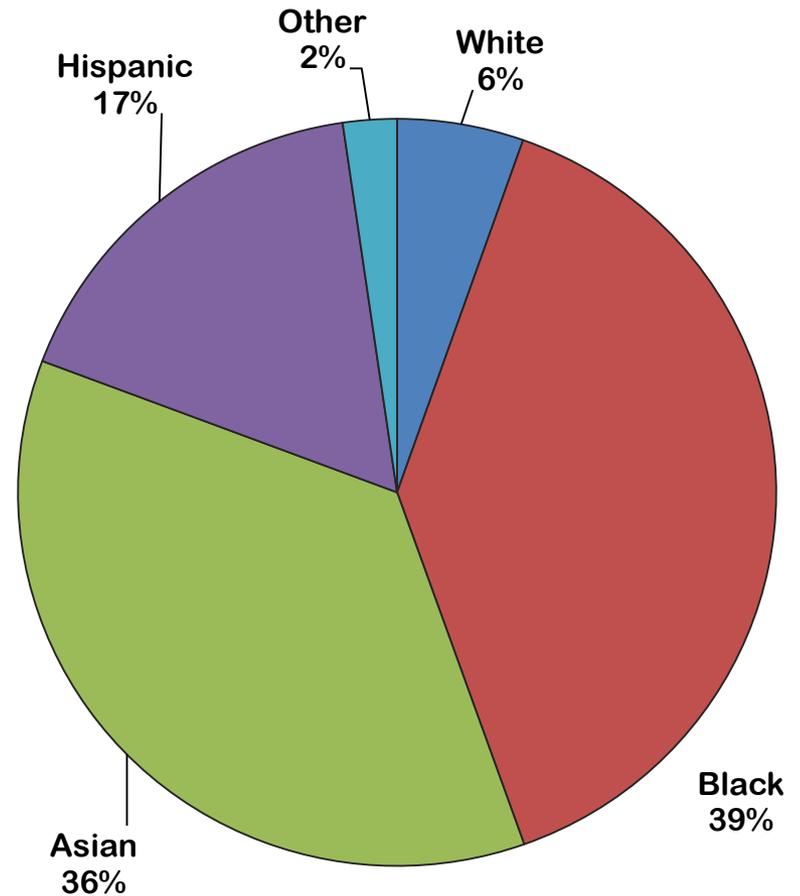
Foreign-born
 US-born

MD TB Cases by Race and Origin, 2013

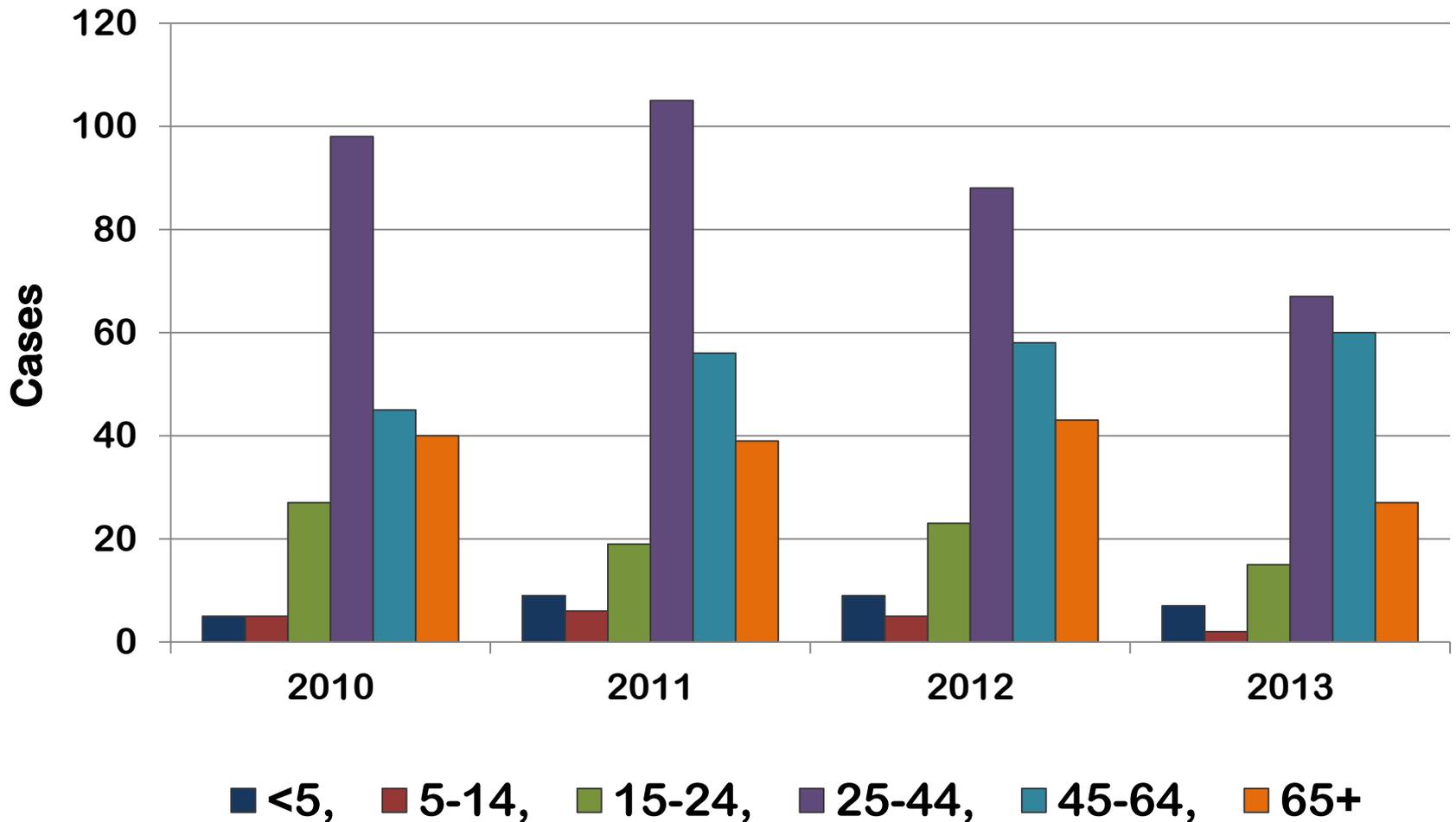
U.S. Born



Foreign Born



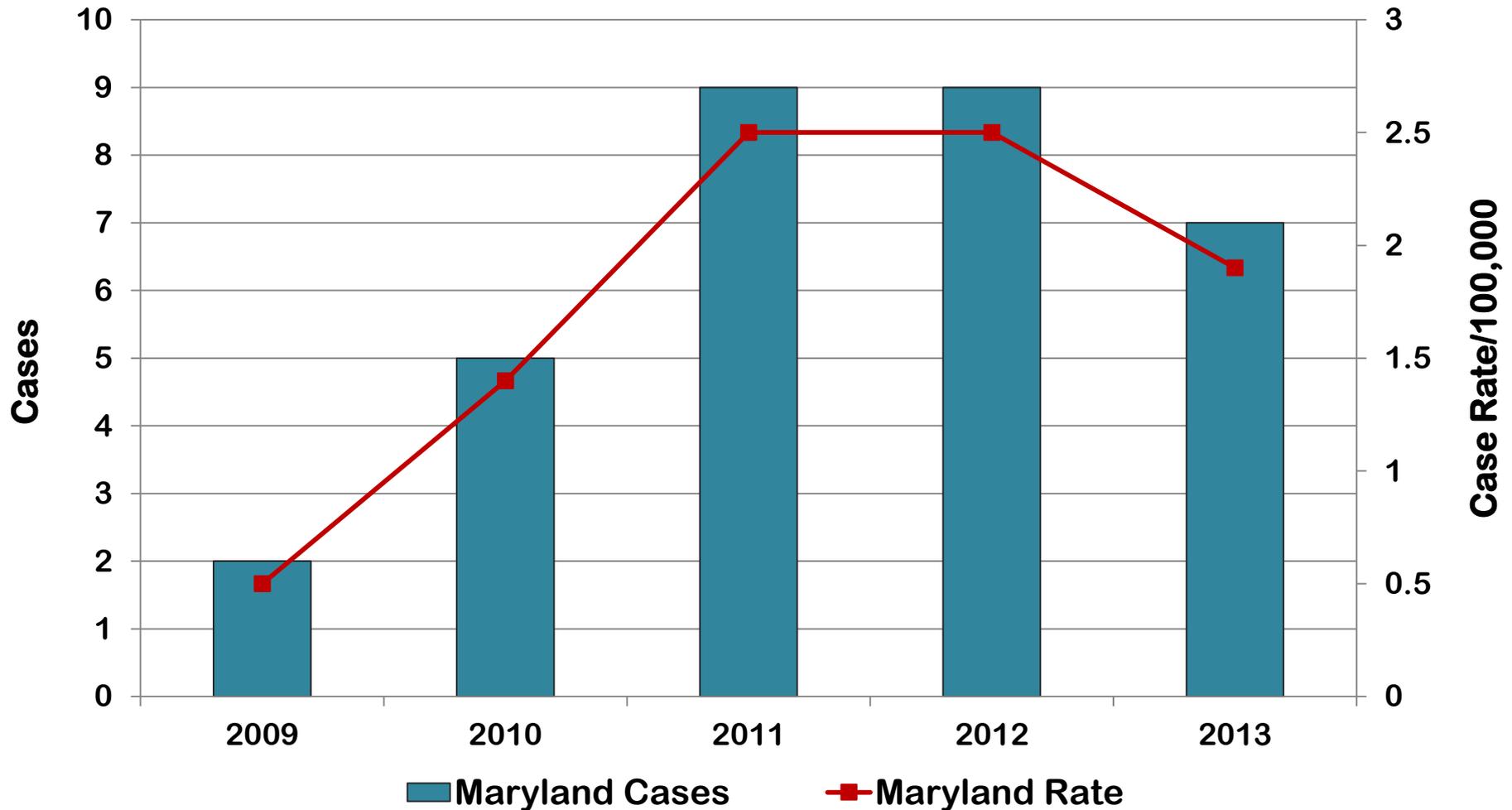
Cases by Age Group Maryland, 2010-2013



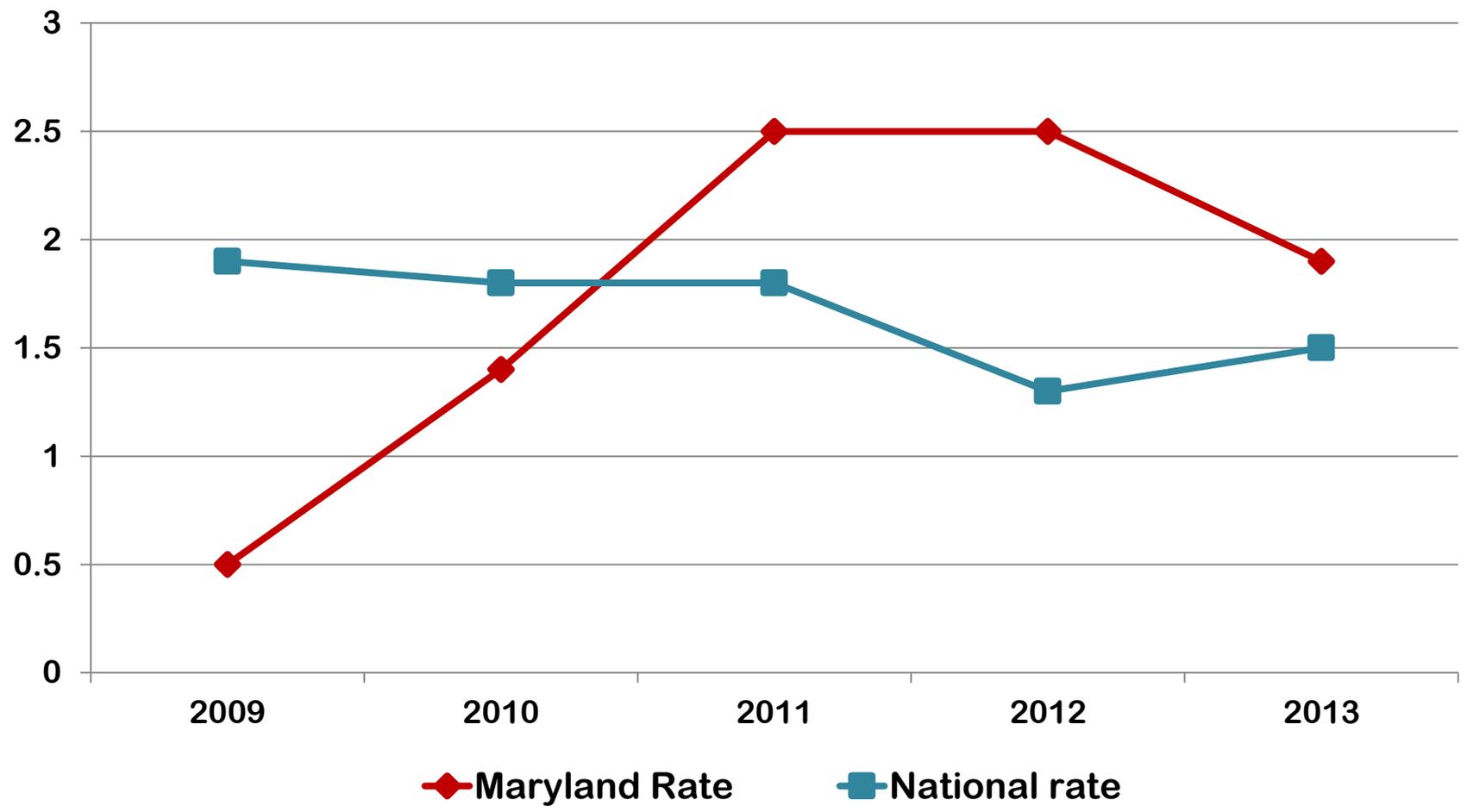
TB in Children

- Children under 5 years old
 - Not many cases, but Maryland has exceeded the national average for 3 years
 - At high risk for TB meningitis
 - Disease can progress quickly
 - Important to find source case
 - Sensitivity results
 - Stop transmission
 - Can represent undiagnosed adult cases

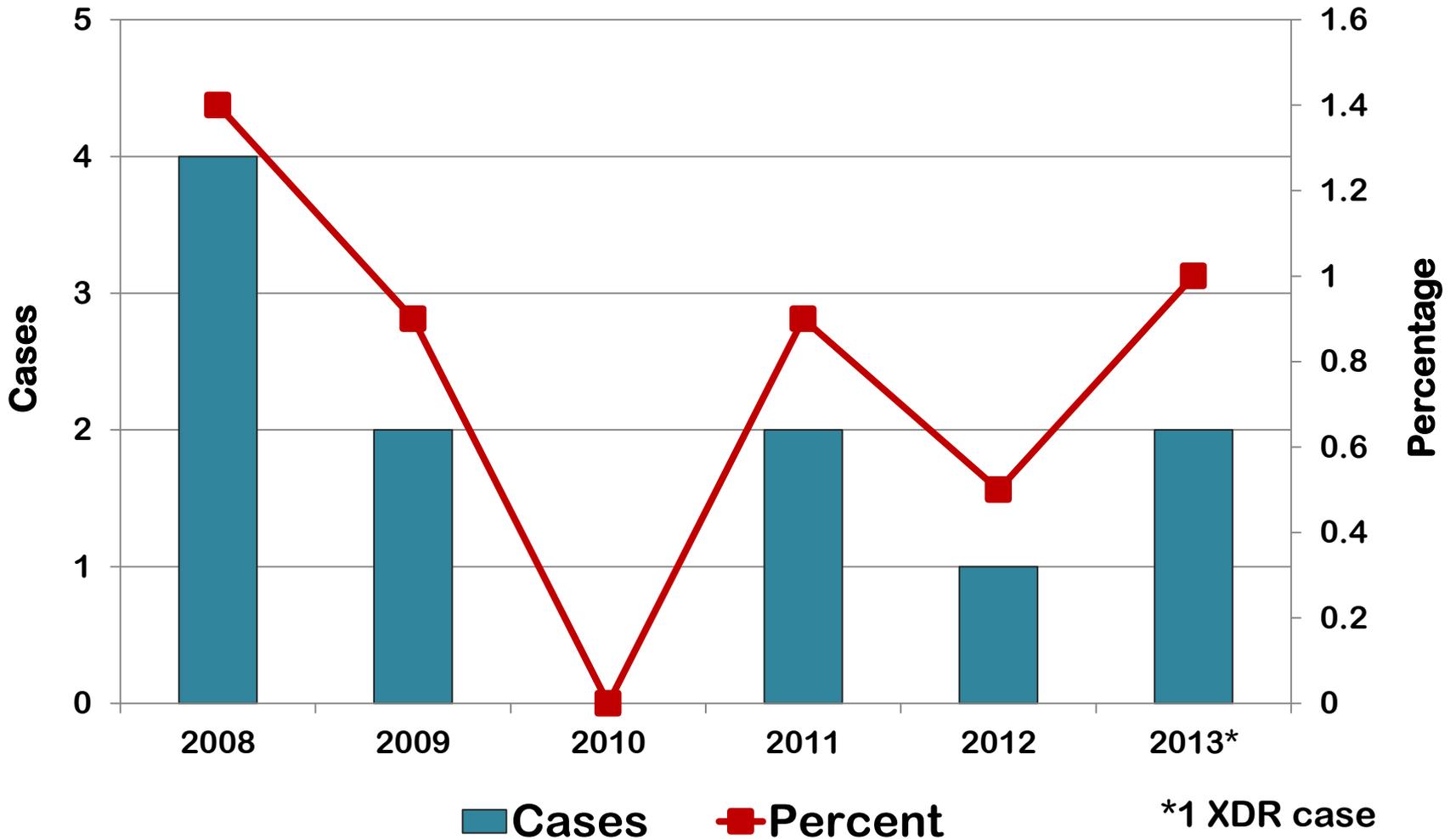
TB in MD Children ≤ 5 years of age, 2009-2013



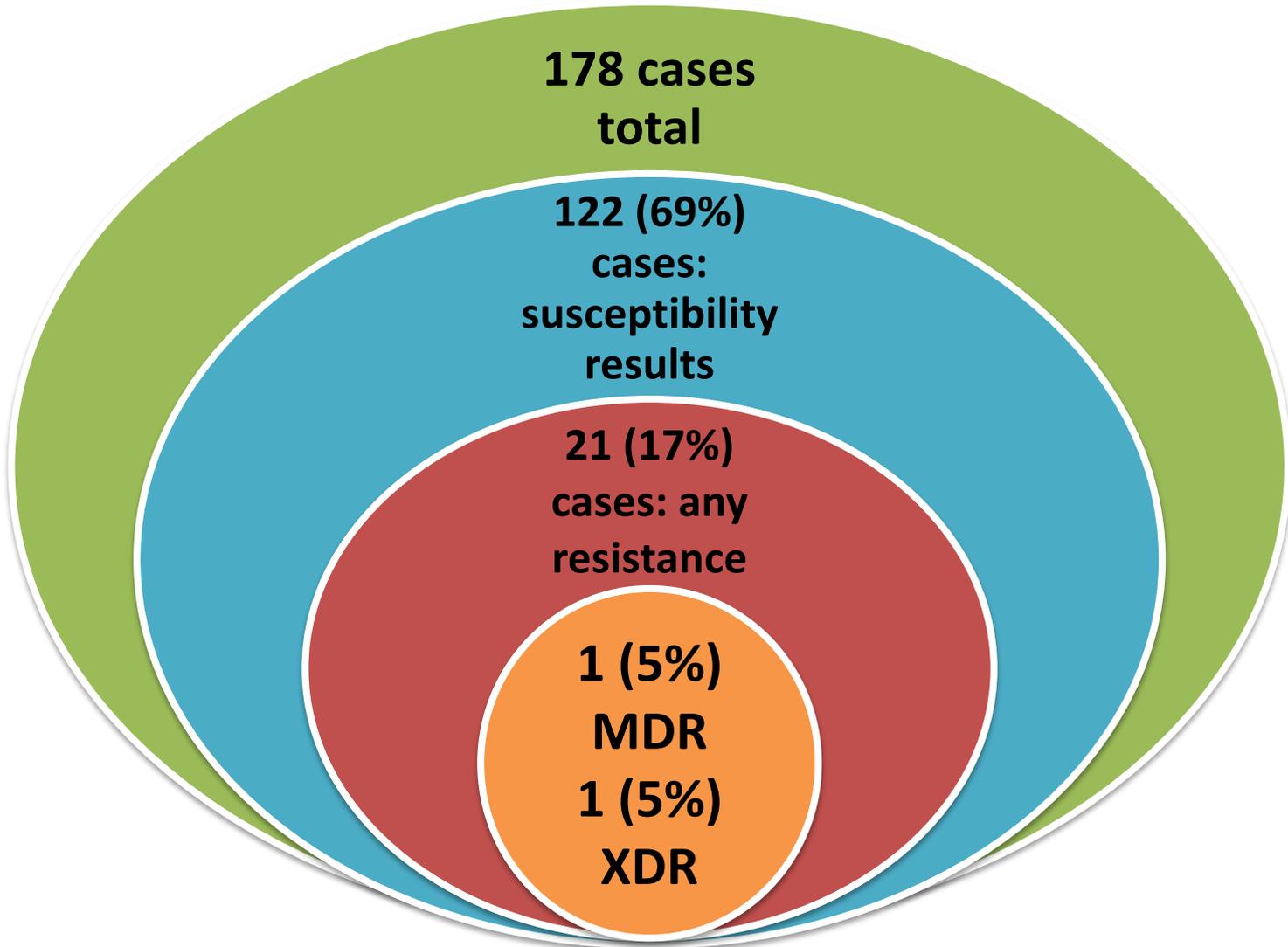
Case Rates in Young Children; Maryland vs. U.S.



MDR/XDR TB in Maryland, 2008-2013



Maryland Drug Resistance, 2013



Starting Treatment with 4 Drugs is Important!

- Maryland INH resistance (2013) is 10.7%
- National INH resistance (2012) is 9.2%
 - U.S. born: 5.7%
 - Foreign born: 10.7%
- 87% of eligible Maryland patients started treatment with 4 drugs in 2013.
 - National goal is 93.4%

TB Risk Factors: Living and Occupational

	2011	2012	2013	National*
Congregate Setting				
Homeless	6%	5%	3%	5.7%
Corrections	1%	0.5%	0%	4.1%
Long Term Care	1%	1%	1%	2.2%
Occupation				
Health Care	6%	9%	3%	4%
Correctional	3%	0.5%	0%	0.2%

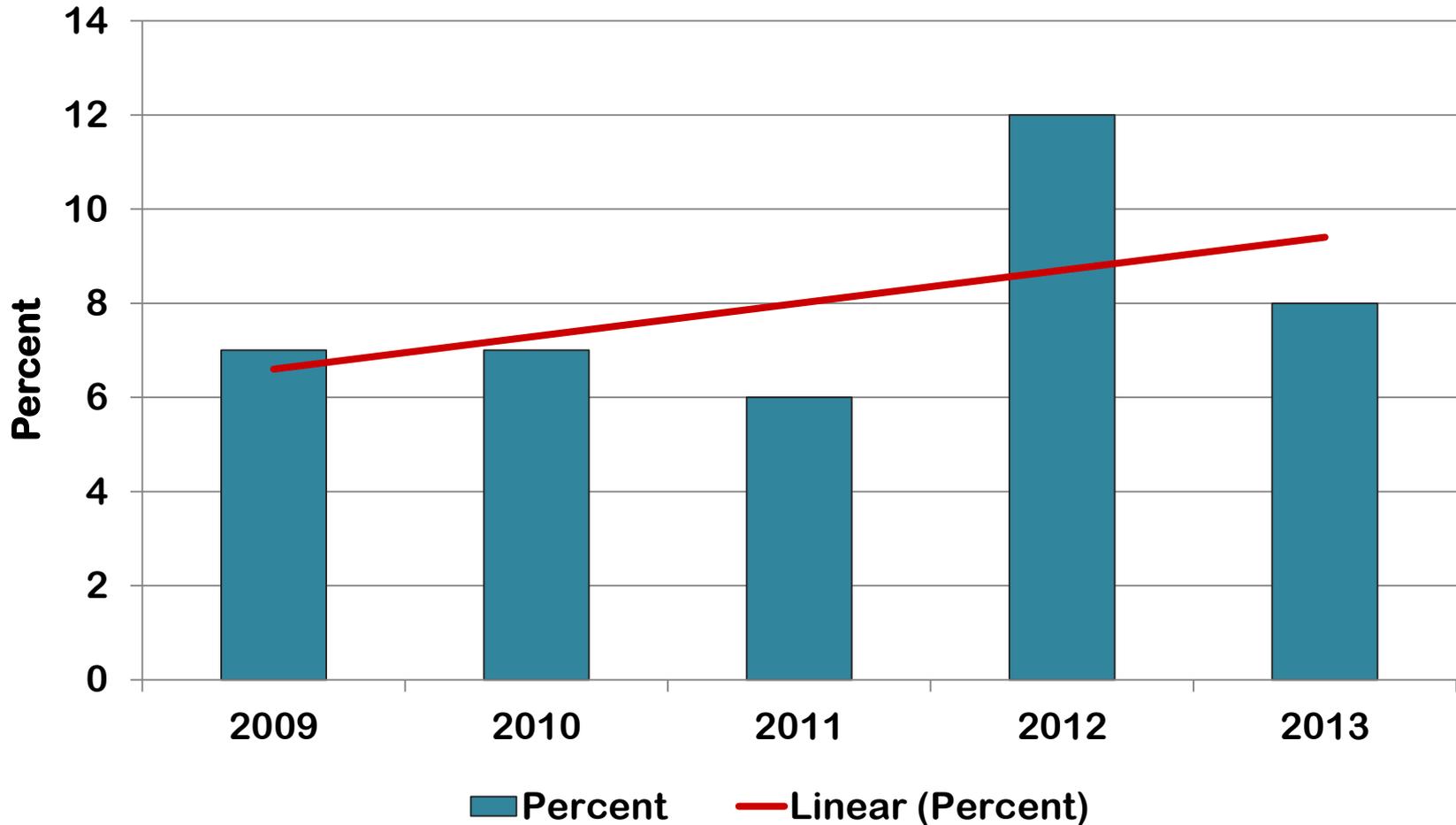
*2012 National Data

TB Risk Factors: Substance Use

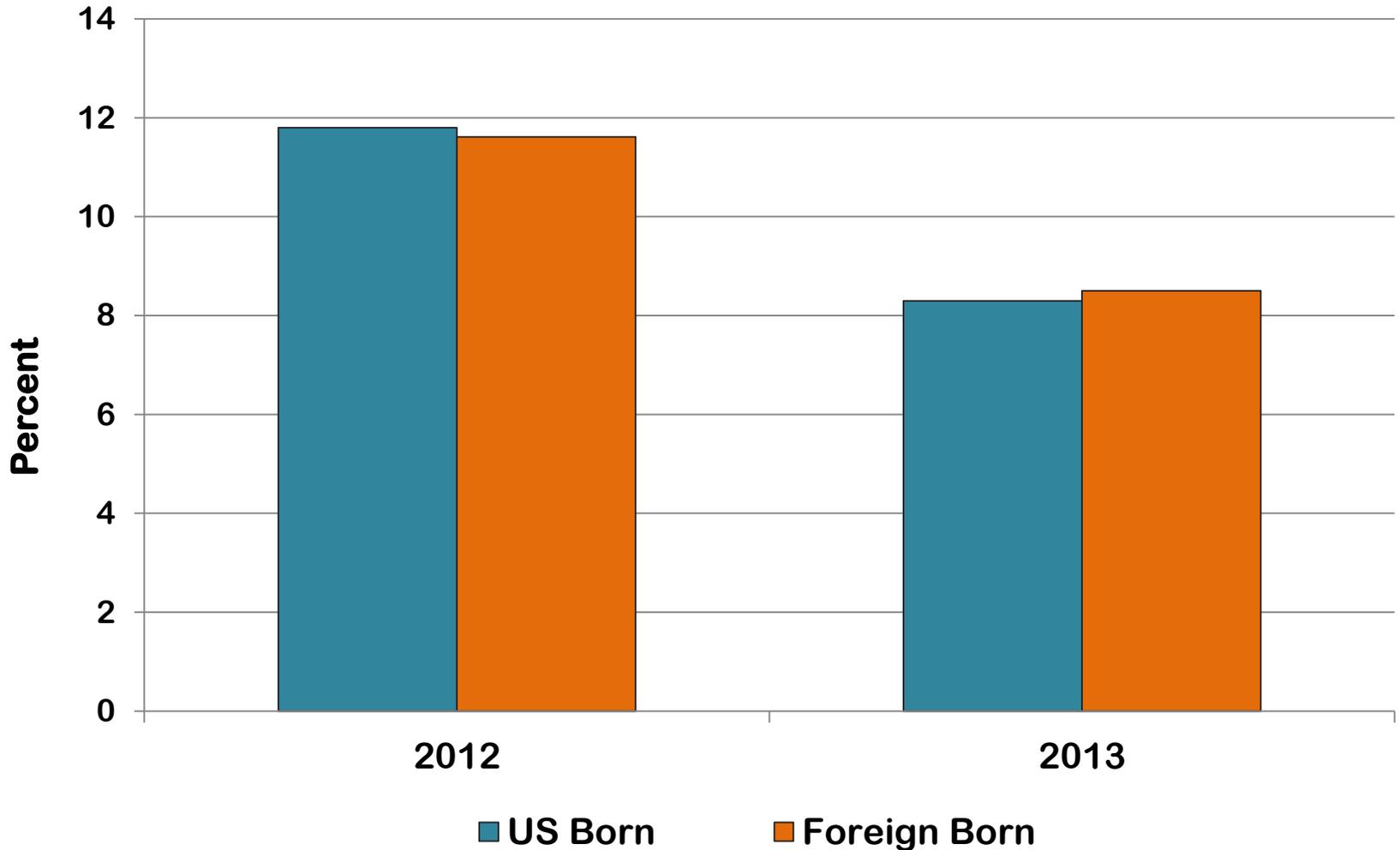
	2011	2012	2013	National*
Injection Drug Use	0.5%	1%	0.6%	1.5%
Non-injection Drug Use	2%	3%	2%	7.4%
Excess Alcohol Use	5%	7.5%	5%	12.4%

*2012 National Data

TB HIV Co-Infection Trends, 2009-2013



TB HIV Co-Infection, Origin of Birth



TB and Diabetes



Questions?