

Tuberculosis

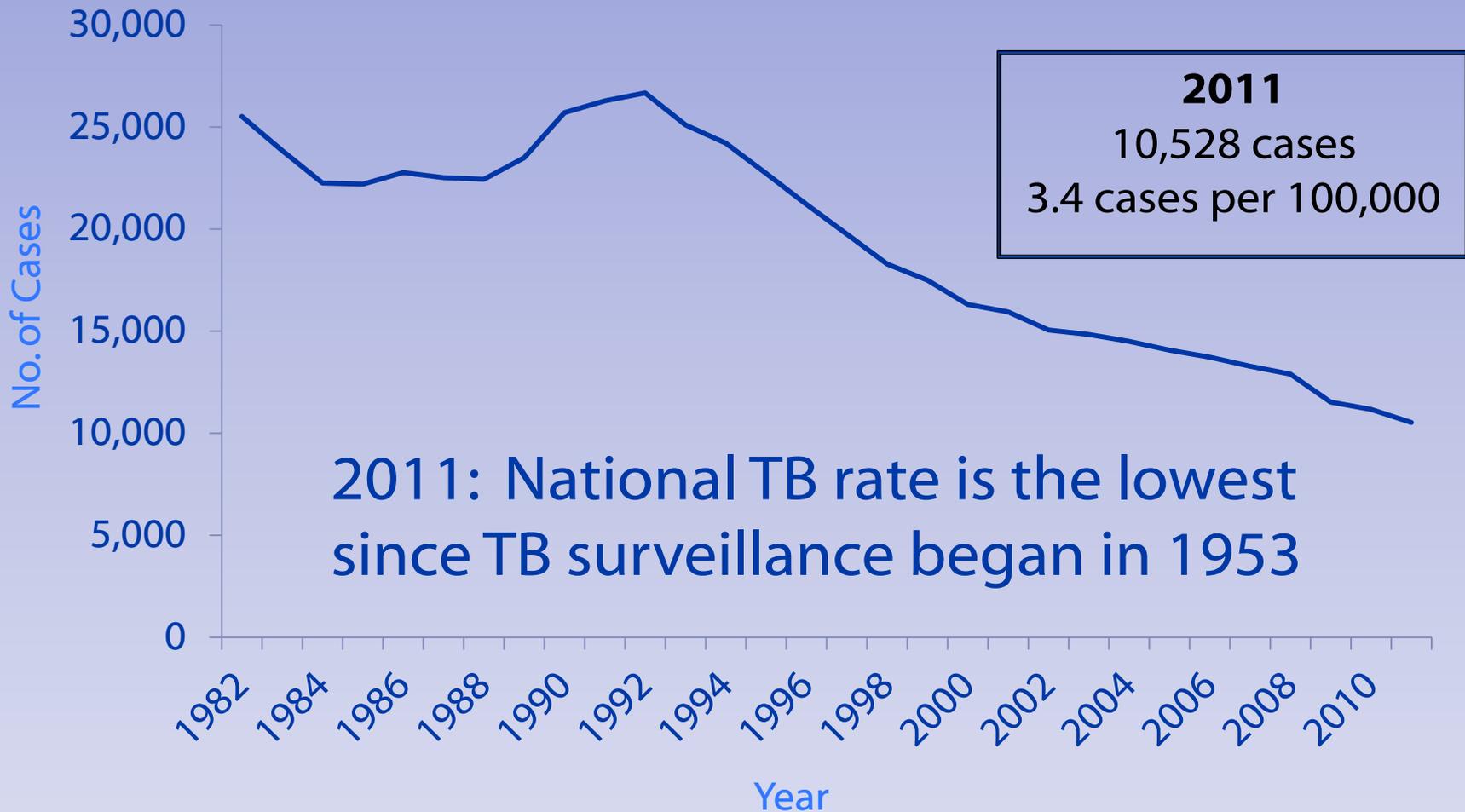
in the United States and Virginia

Where we have been

Where we are now

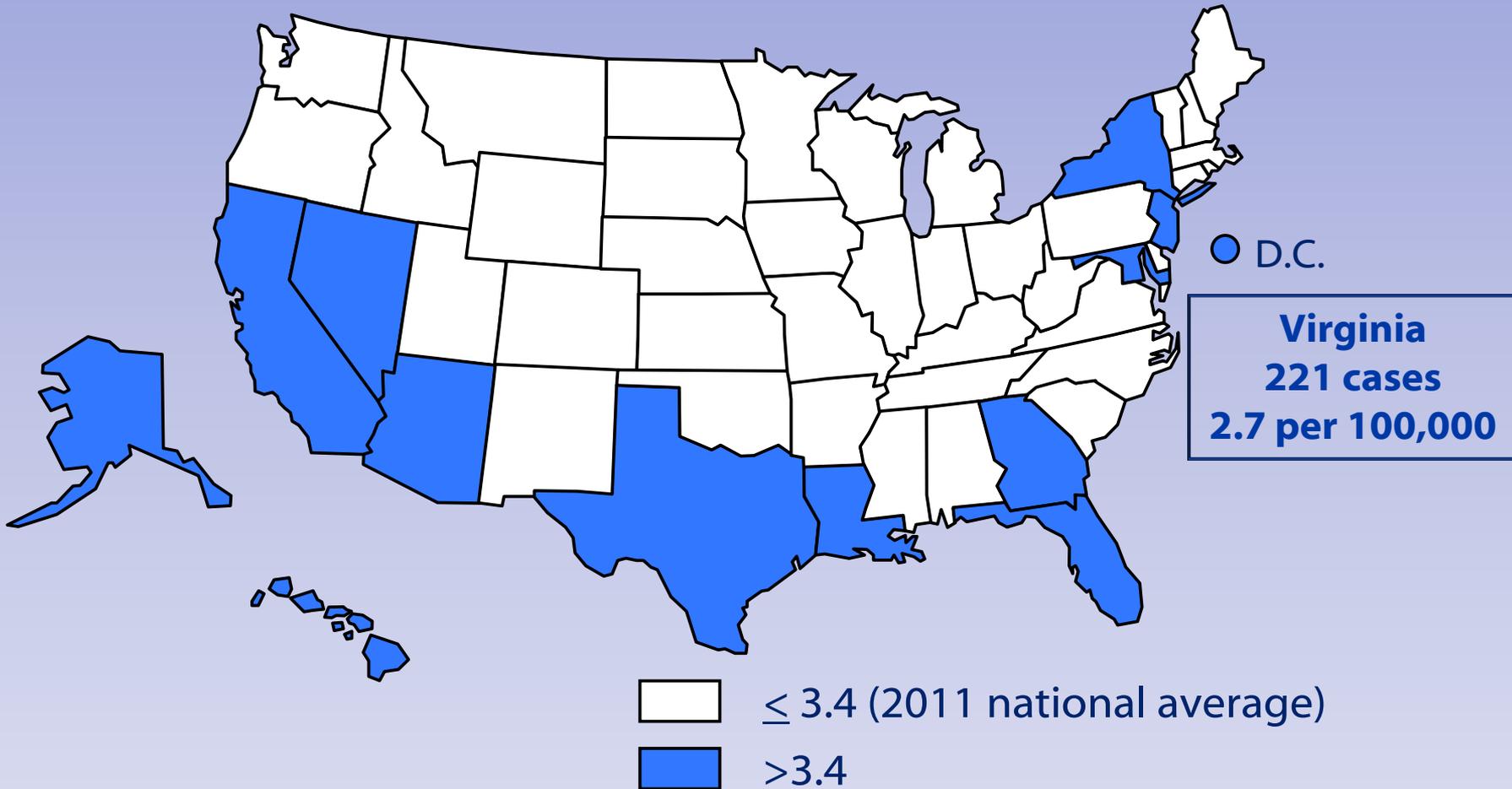
David Trump, MD, MPH
Director, Office of Epidemiology
Virginia Department of Health

Reported TB Cases United States, 1982–2011*



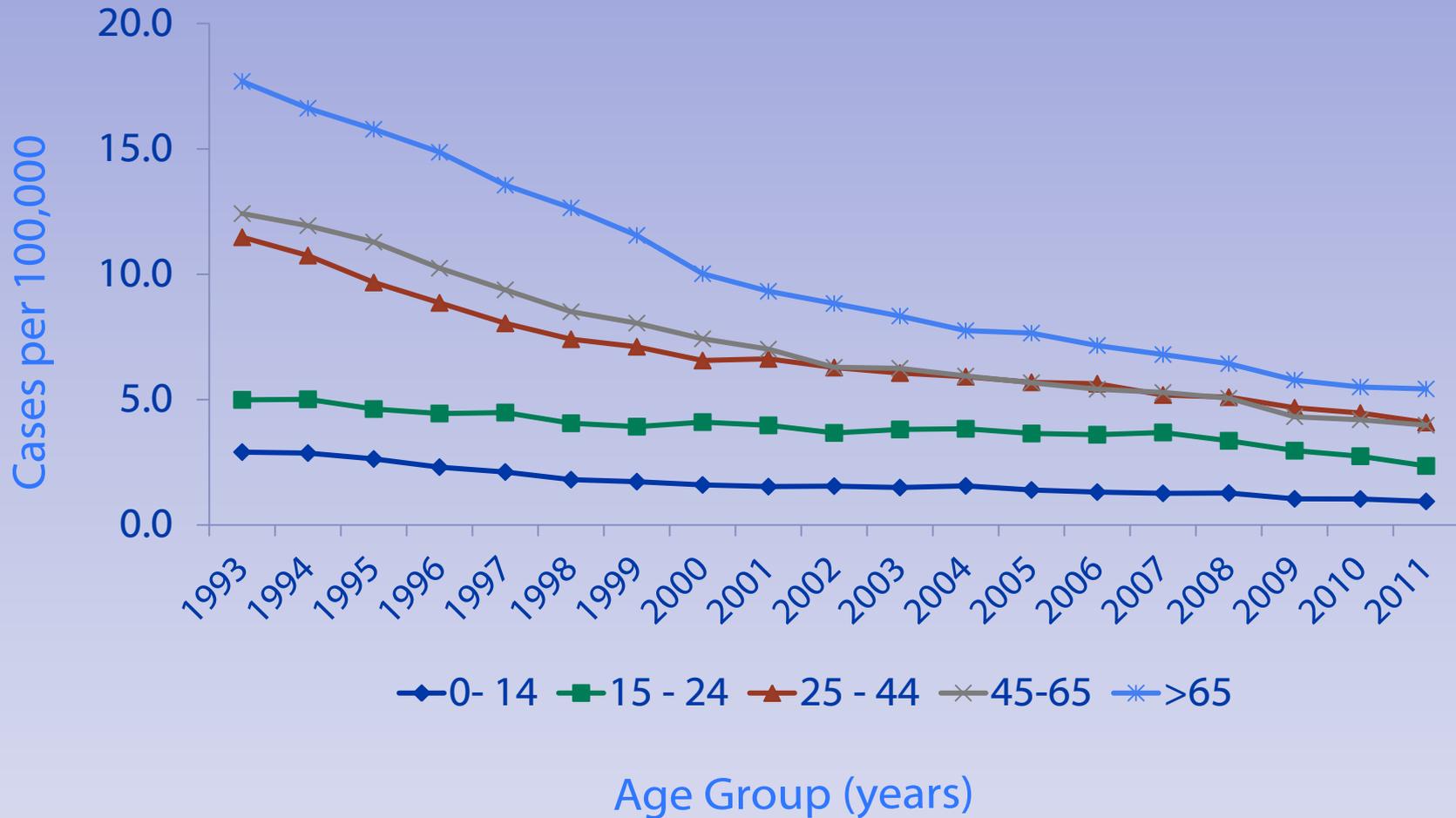
*Updated as of June 25, 2012.

TB Case Rates,* United States, 2011



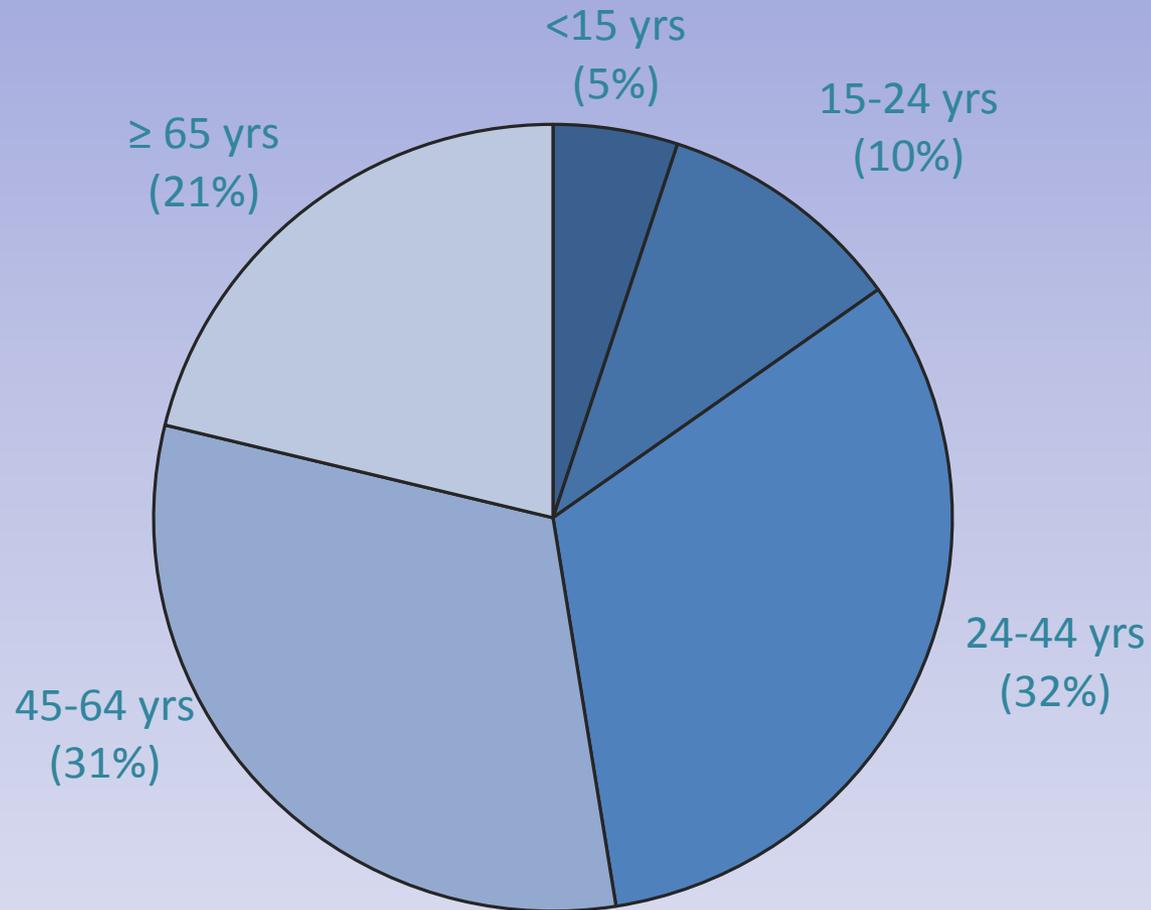
*Cases per 100,000.

TB Case Rates* by Age Group United States, 1993–2011



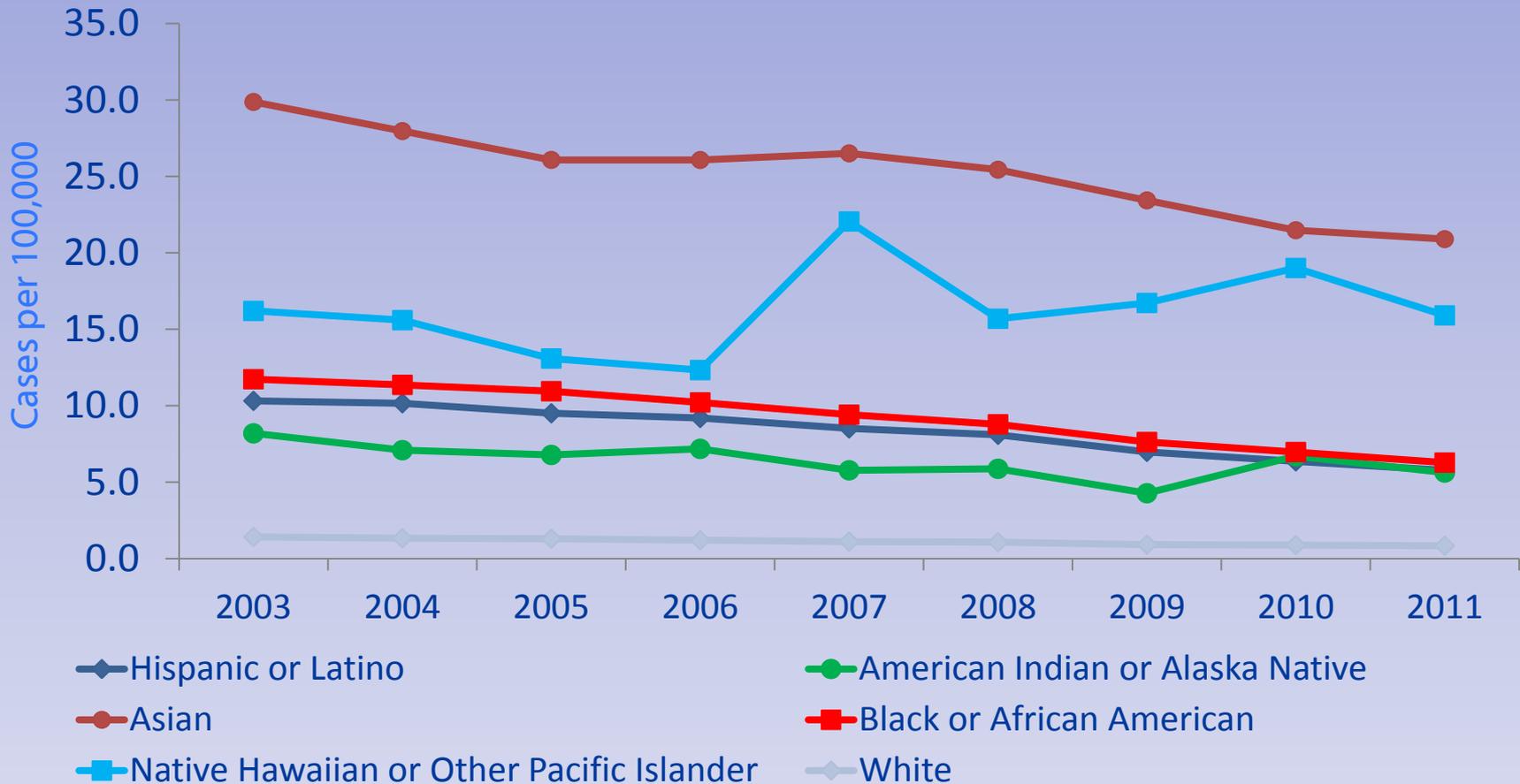
* Updated as of June 25, 2012.

Reported TB Cases by Age Group, United States, 2011



TB Case Rates by Race/Ethnicity*

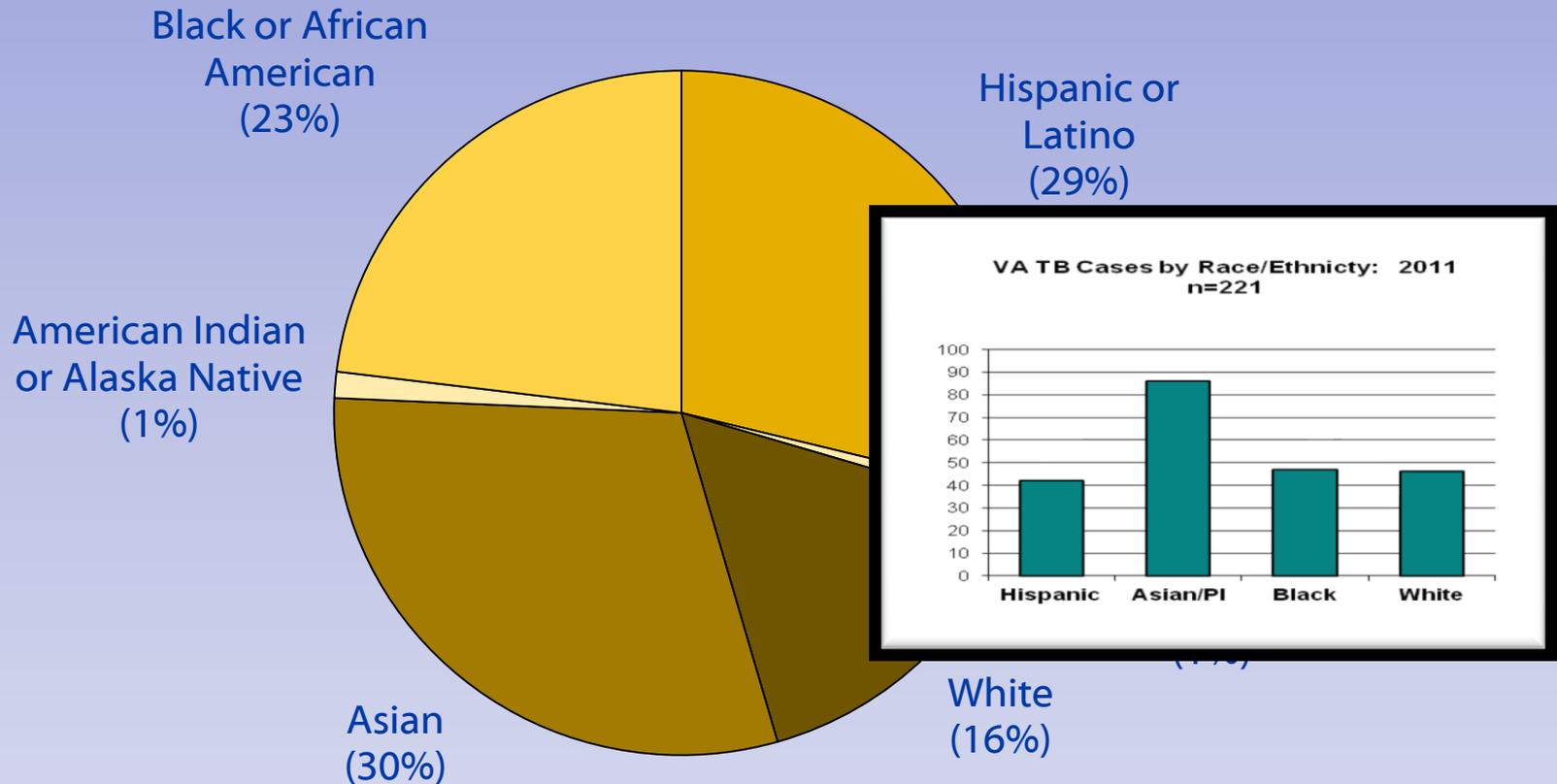
United States, 2003–2011**



*All races are non-Hispanic.

**Updated as of June 25, 2012.

Reported TB Cases by Race/Ethnicity* United States, 2011

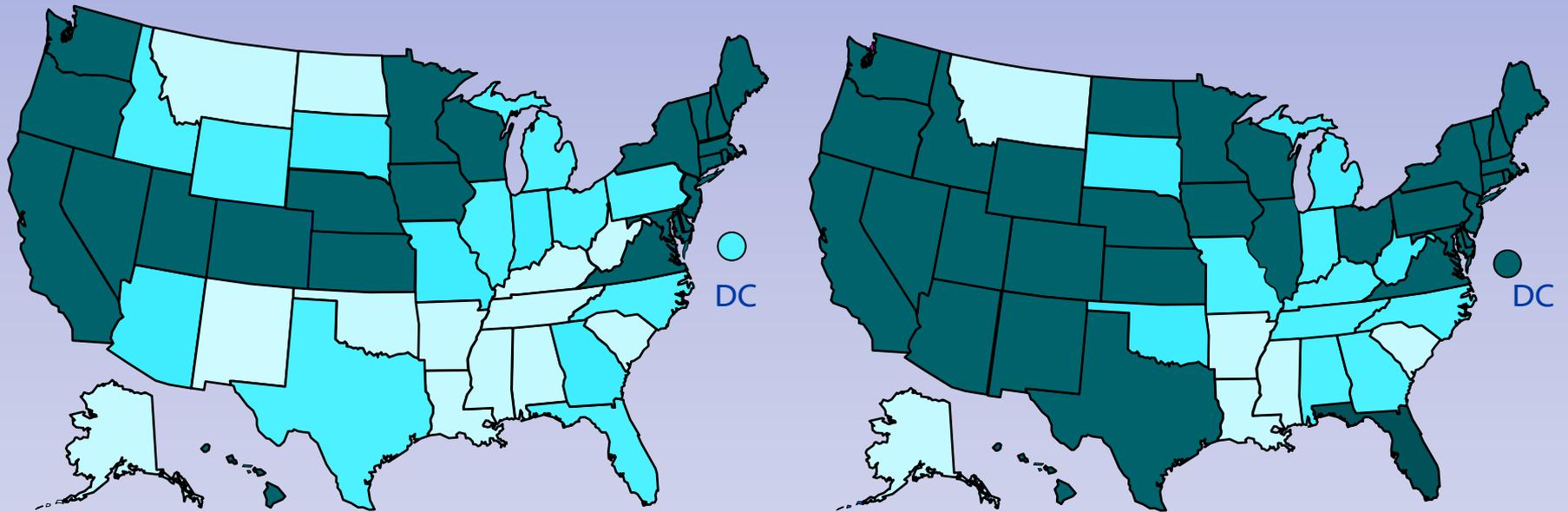


*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

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

2001

2011

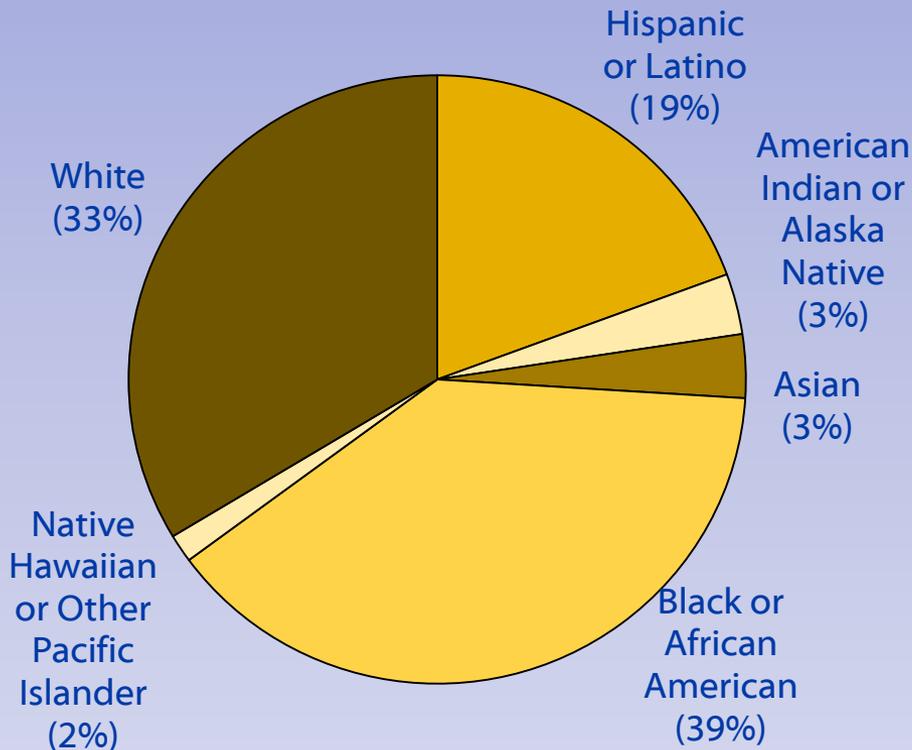


Virginia
161 (72.4%) cases
among foreign-born

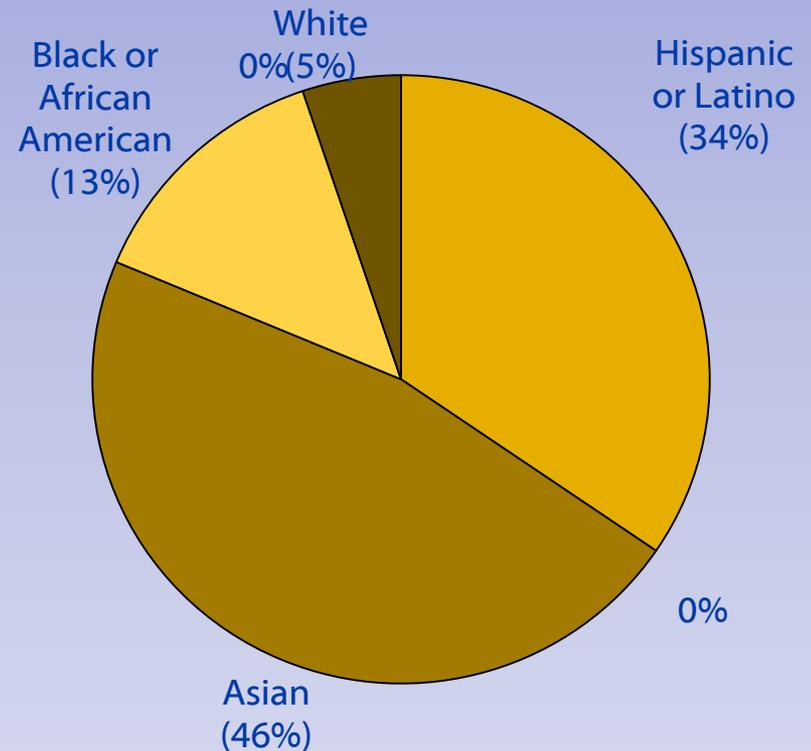
*Updated as of June 25, 2012.

Reported TB Cases by Origin and Race/Ethnicity,* United States, 2011

U.S.-born



Foreign-born**



*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

** American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander accounted for less than 1% of foreign-born cases and are not shown.

Top Five Countries of Birth for Foreign-born TB Cases

US (2010)

Virginia (2011)

Mexico

India

Philippines

Ethiopia

India

Viet Nam

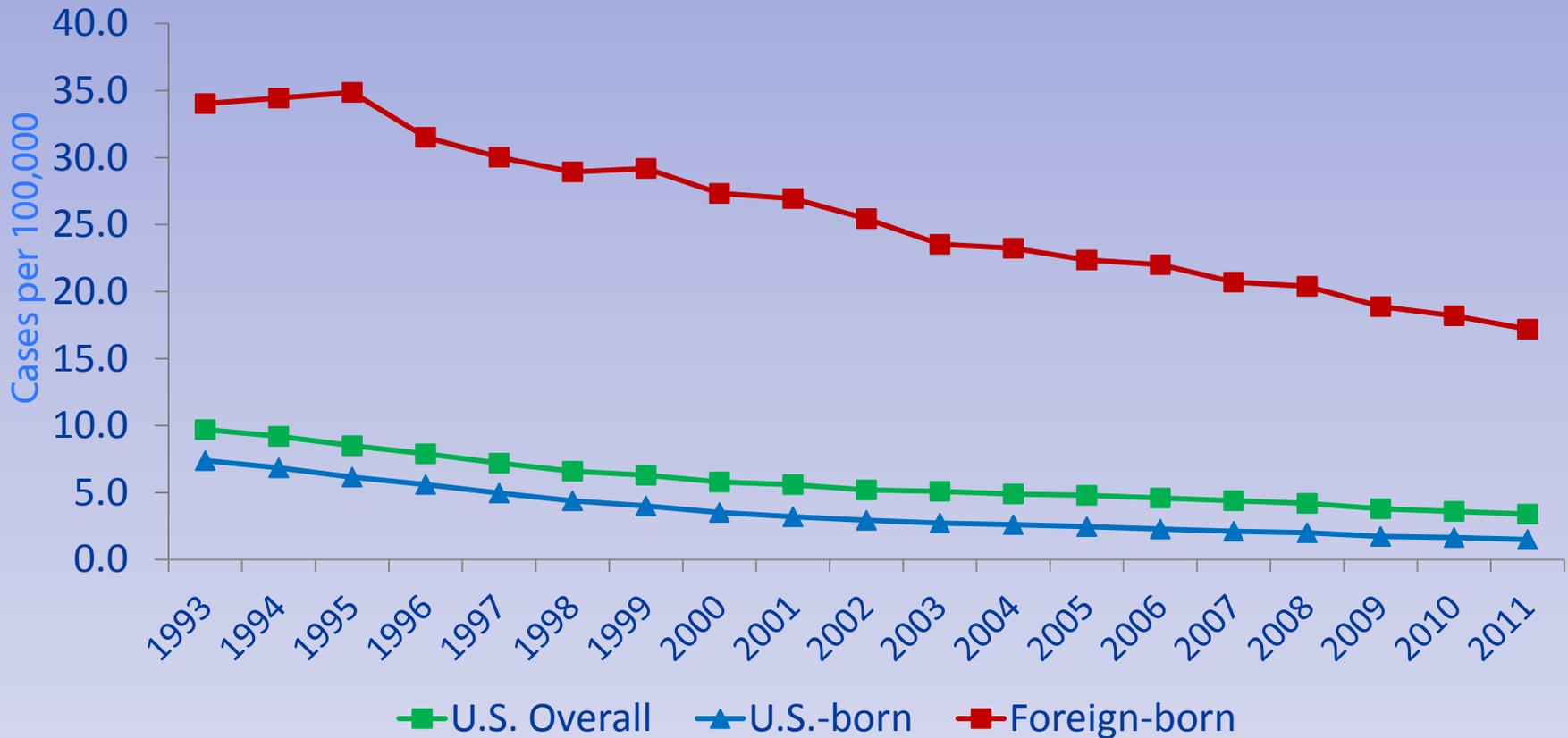
Viet Nam

Philippines

China

China, Mexico, Nepal
& Peru (each with 8 cases)

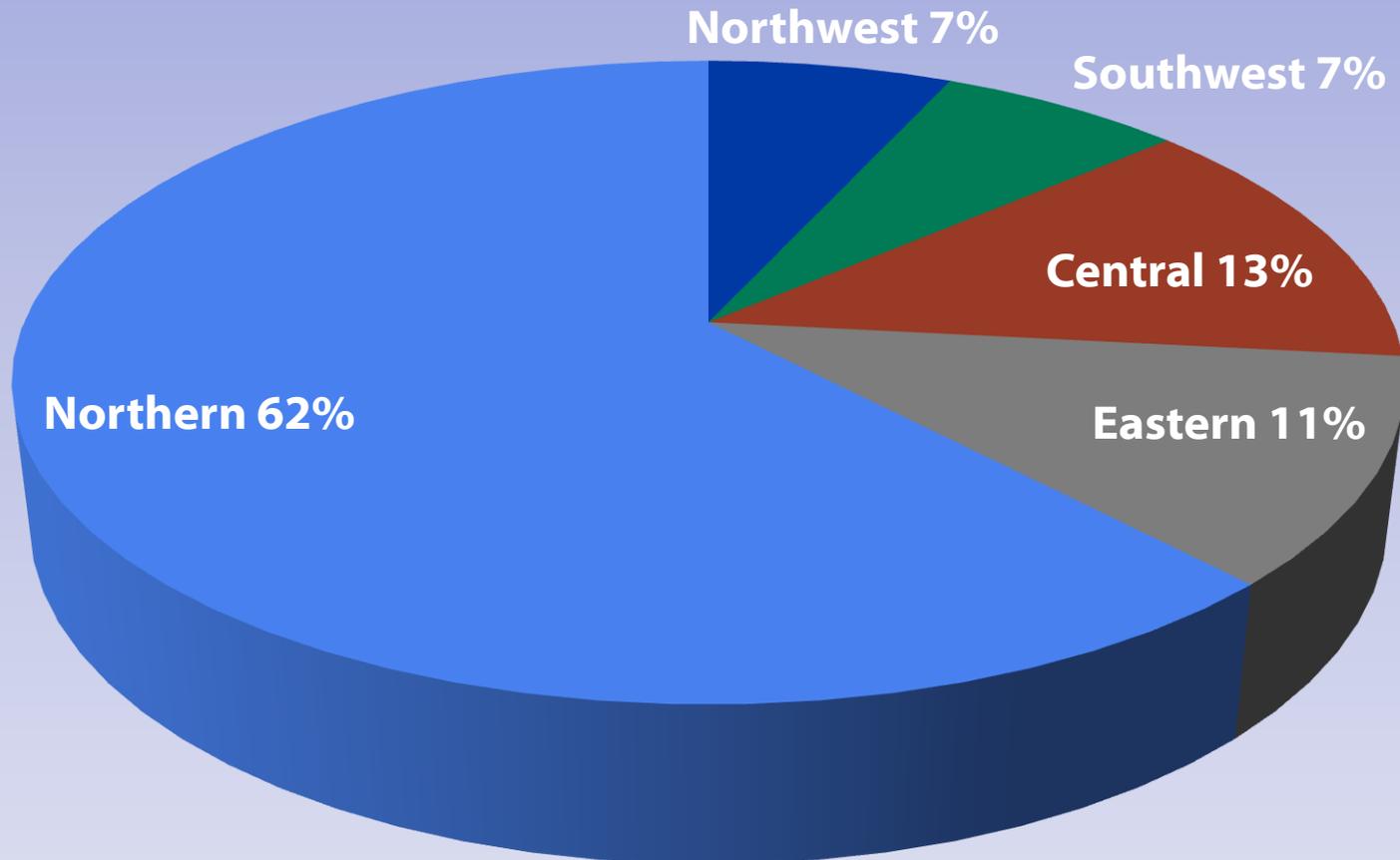
TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2011*



*Updated as of June 25, 2012.

TB by Health Region, Virginia

Cases, 2011

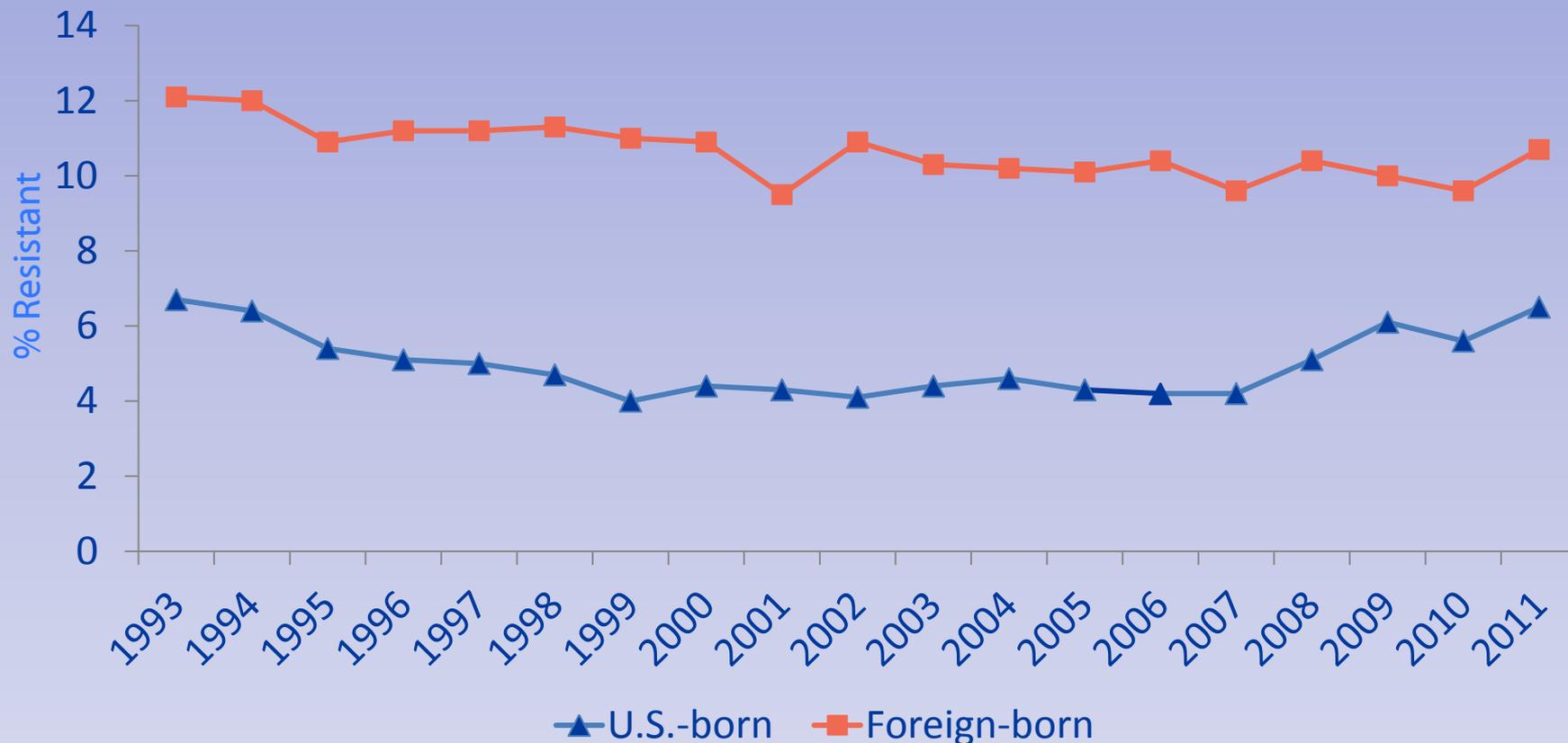


TB by Health Region, Virginia

Number & Rate per 100,000

Year	Central		Eastern		Northern		Northwest		Southwest	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
2007	32	2.4	46	2.6	194	9.3	17	1.4	20	1.5
2008	39	2.9	48	2.7	169	8.0	20	1.7	16	1.2
2009	33	2.5	38	2.1	158	7.3	24	2.0	20	1.5
2010	44	3.3	37	2.0	147	6.6	22	1.8	18	1.3
2011	28	2.0	26	1.4	137	6.0	15	1.2	15	1.1

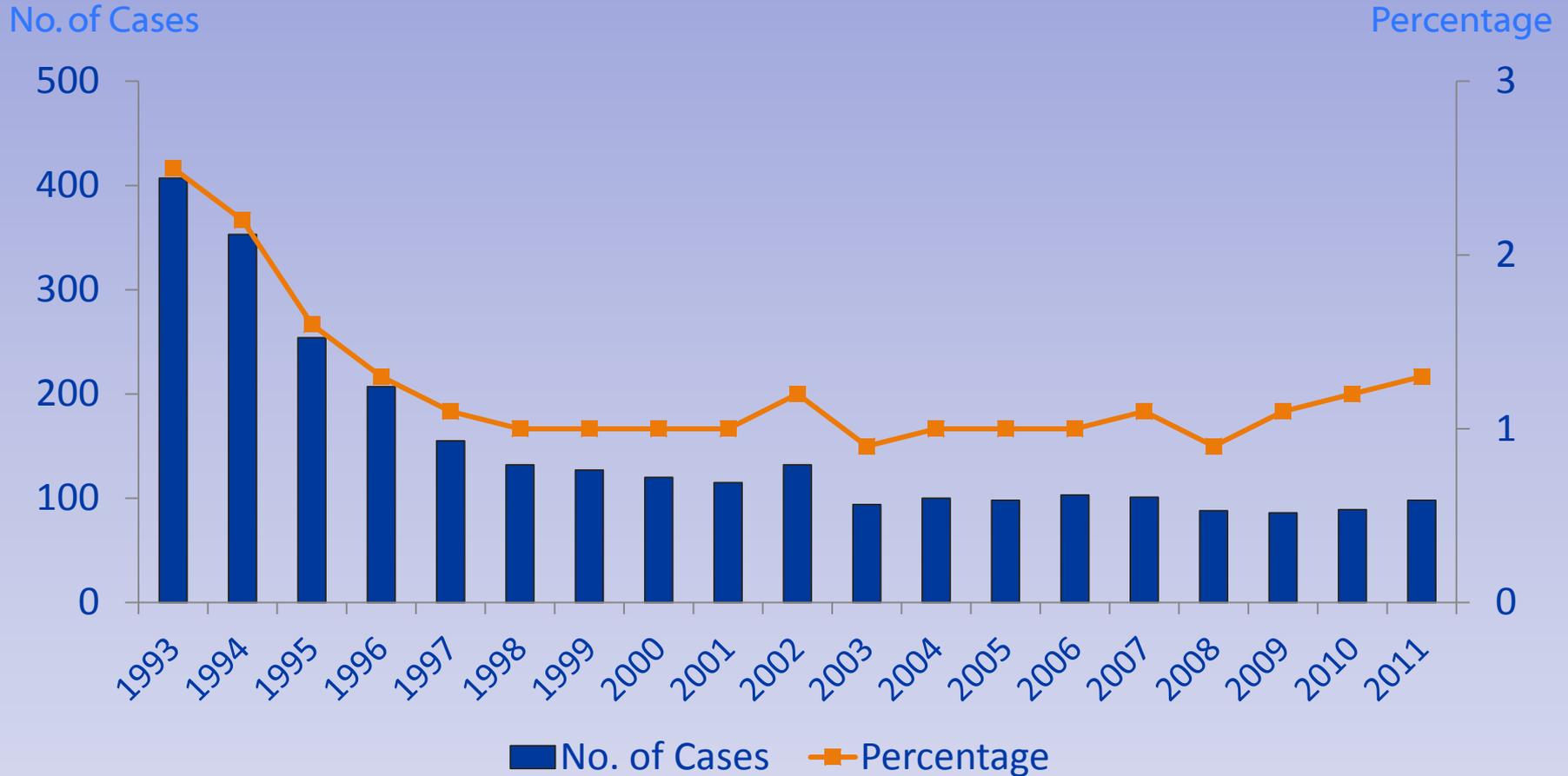
Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons United States, 1993 – 2011*



*Updated as of June 25, 2012.

Note: Based on initial isolates from persons with no prior history of TB.

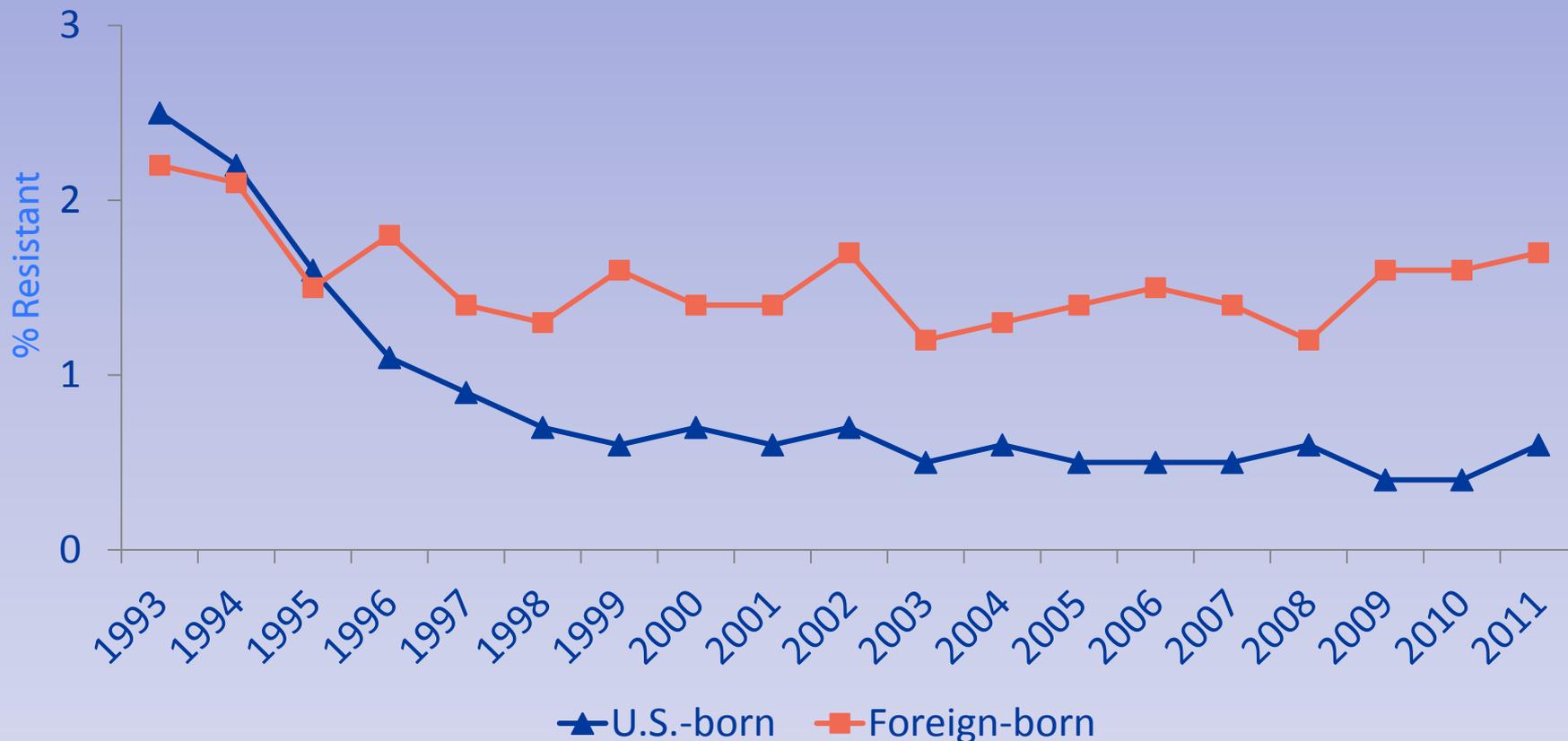
Primary MDR TB United States, 1993 – 2011*



*Updated as of June 25, 2012.

Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

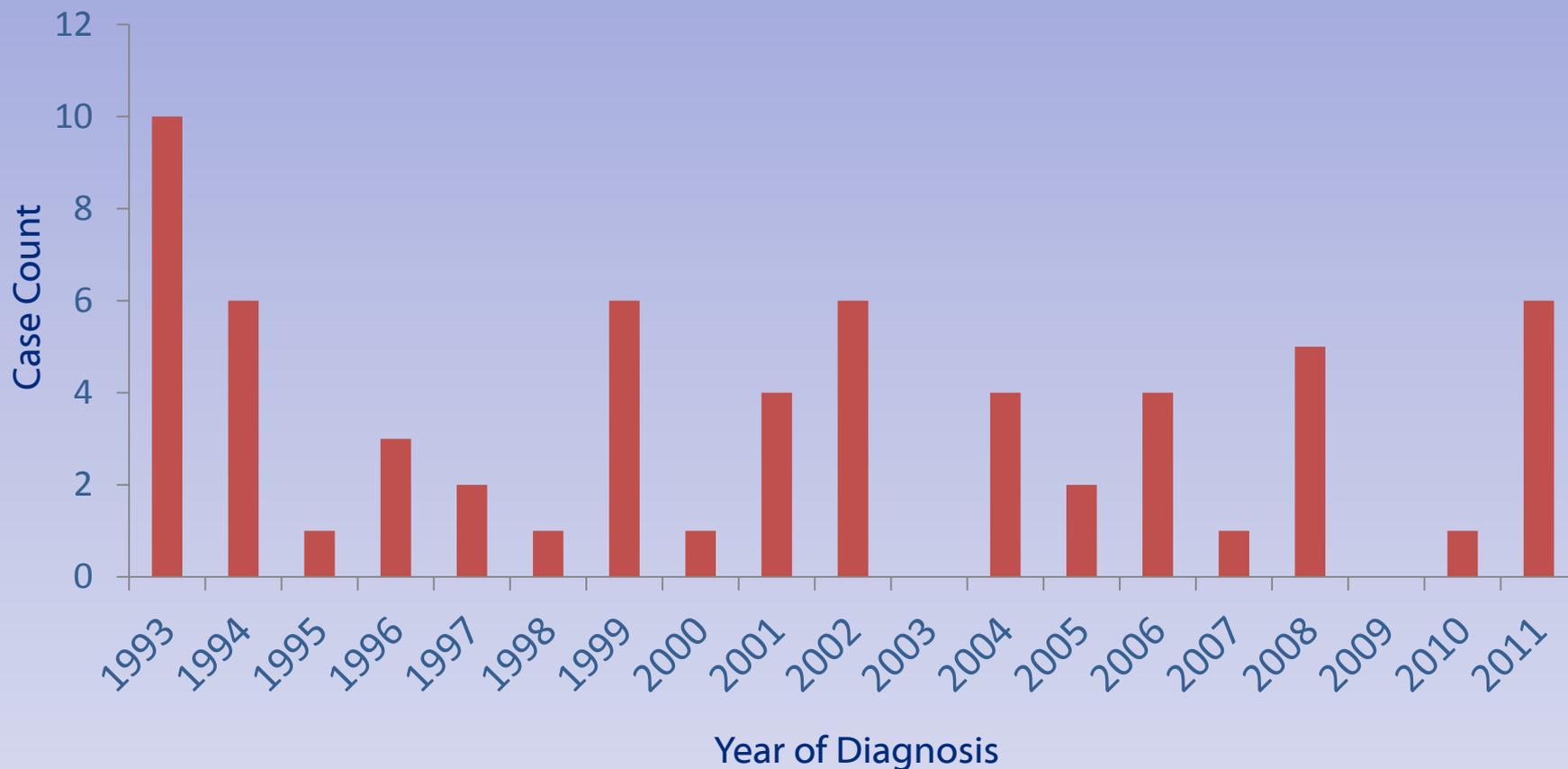
Primary MDR TB in U.S.-born vs. Foreign-born Persons United States, 1993 – 2011*



*Updated as of June 25, 2012.

Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

XDR TB Case Count Defined on Initial DST* by Year, 1993 – 2011**

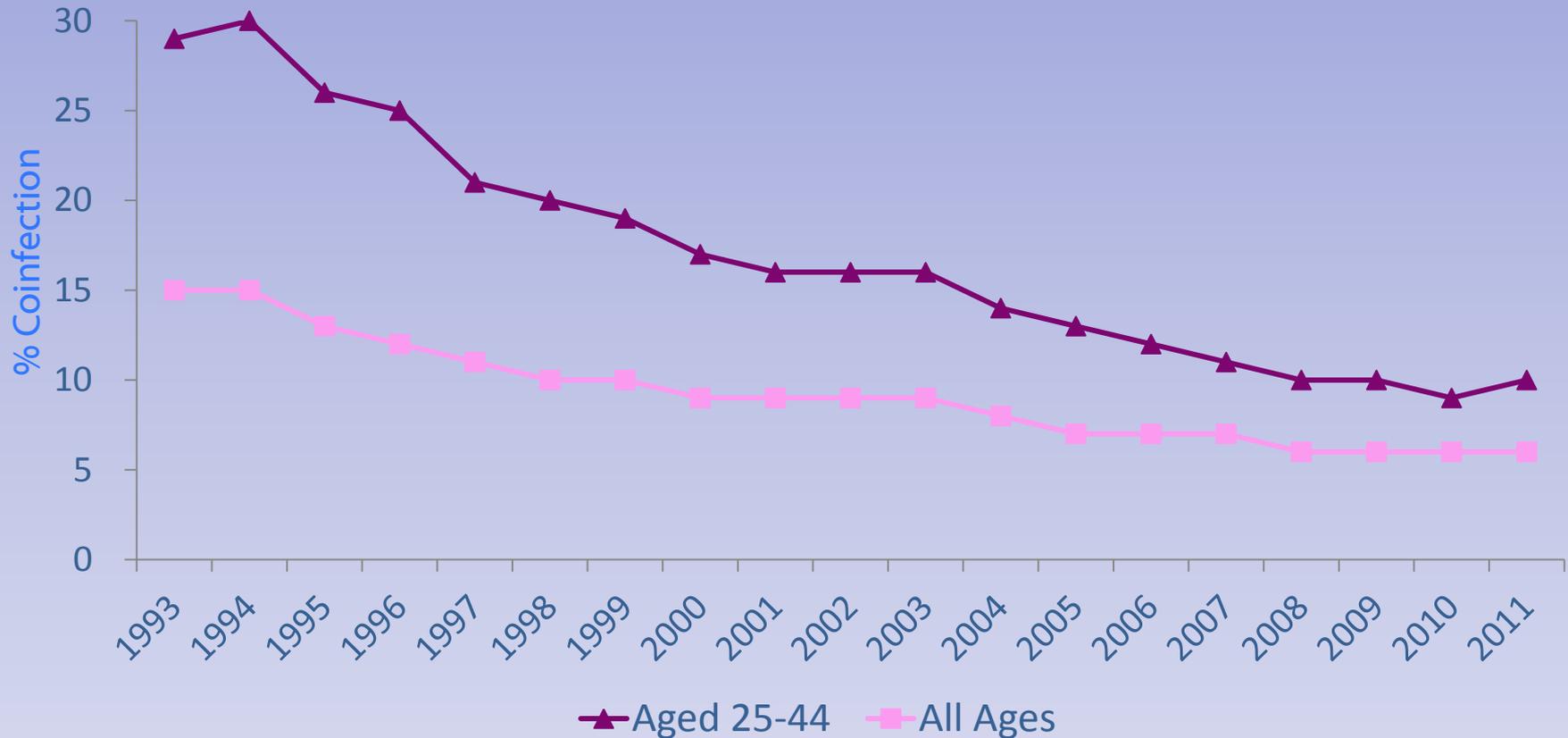


* Drug susceptibility test

** Updated as of June 25, 2012.

Note: Extensively drug-resistant TB (XDR TB) is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs

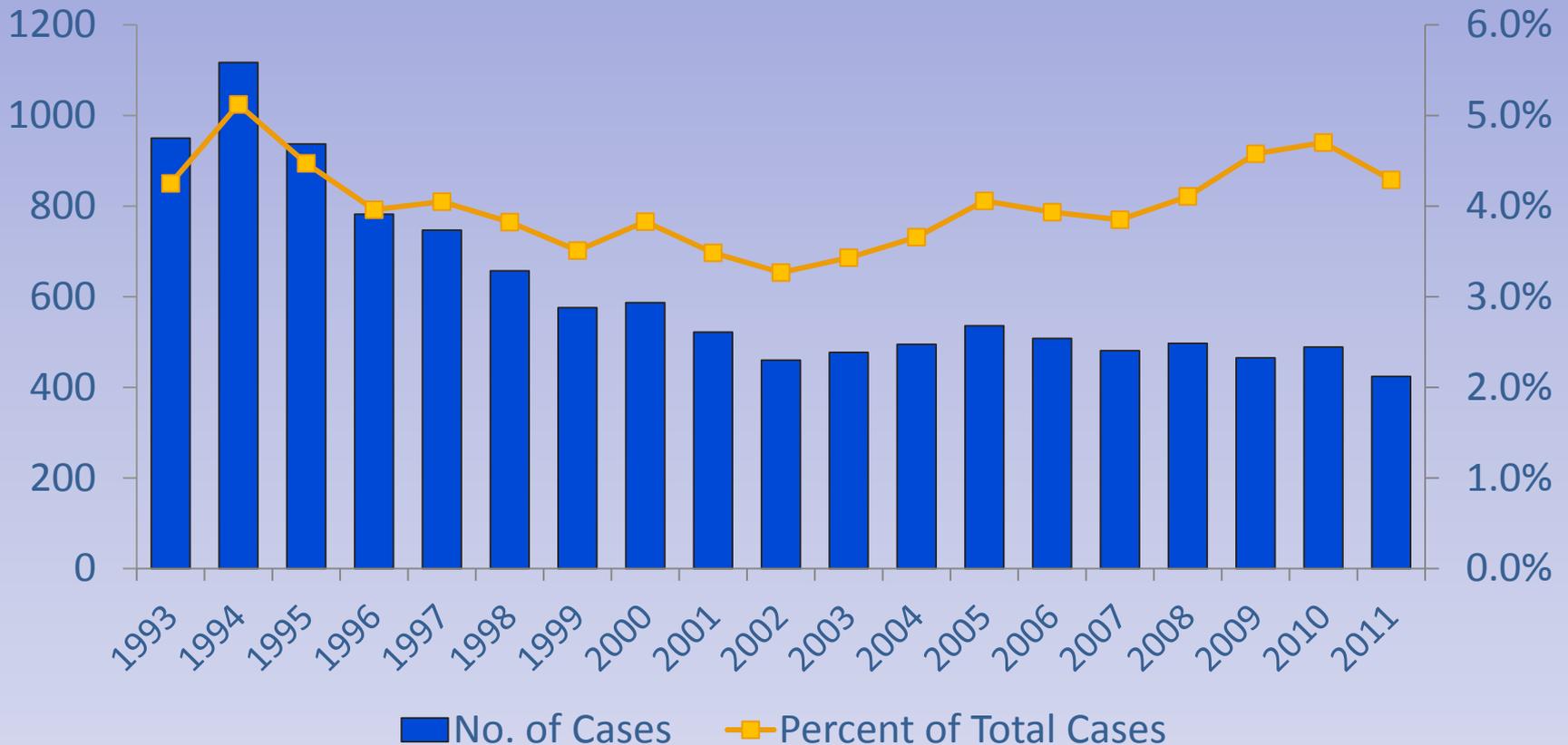
Estimated HIV Coinfection in Persons Reported with TB, United States, 1993 – 2011*



*Updated as of June 25, 2012

Note: Minimum estimates based on reported HIV-positive status among all TB cases in the age group

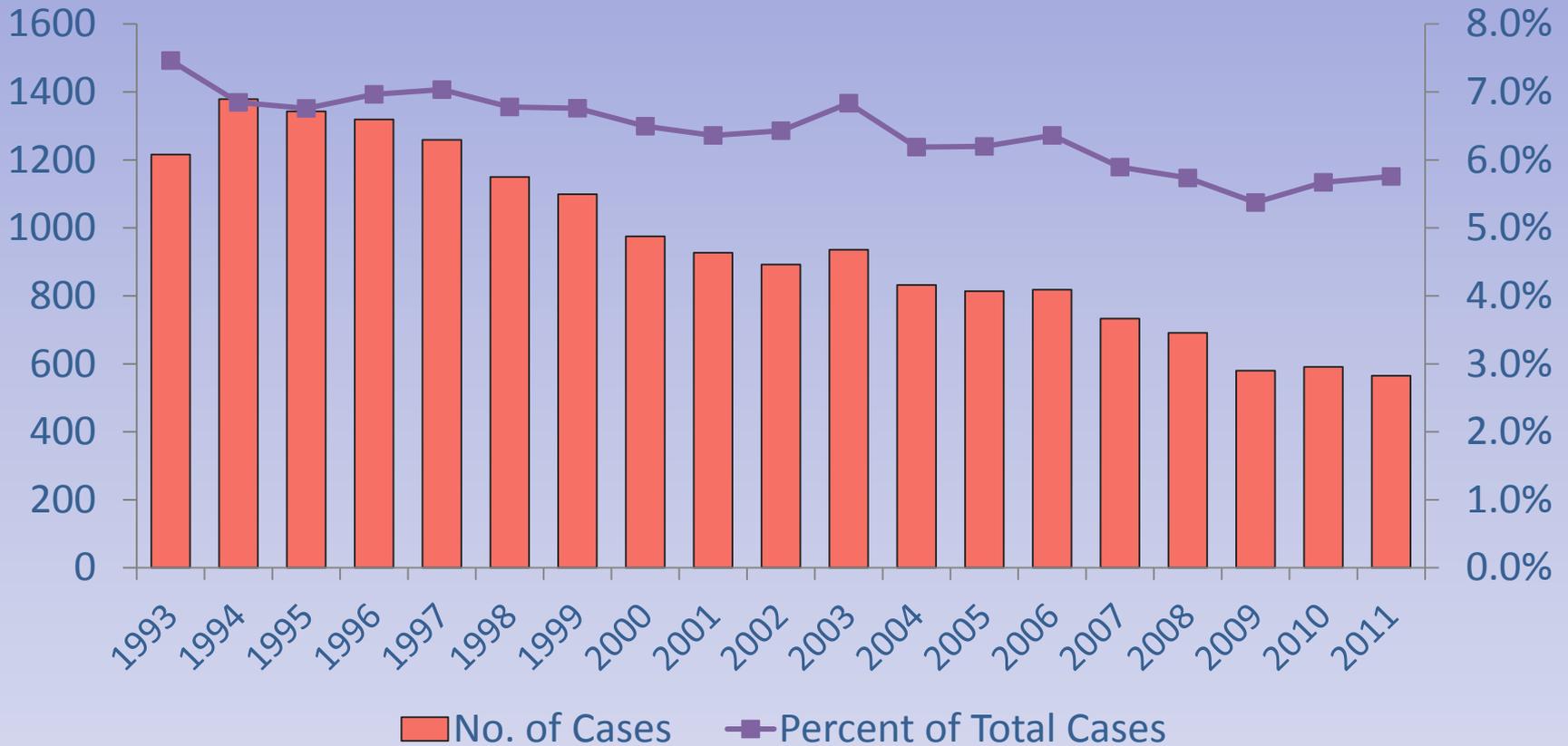
TB Cases by Residence in Correctional Facilities, Age ≥15, United States, 1993-2011*



*Updated as of June 25, 2012

Note: Resident of correctional facility at time of TB diagnosis

TB Cases Reported as Homeless in the 12 Months Prior to Diagnosis, Age ≥15, United States, 1993-2011*



*Updated as of June 25, 2012

Note: Homeless within past 12 months of TB diagnosis

Refugees With Suspected TB* Arrivals by Year, Virginia



**Based on positive Mantoux skin test or positive IGRA and/or abnormal chest x-ray*

***2012 data through June 30th.*

Tuberculosis in the United States and Virginia

Where are we going?

- ❑ **Increased risk of MDR and XDR TB**
- ❑ **Continuing population of persons with LTBI**
- ❑ **Challenges of working with those populations most at risk for TB and LTBI**
- ❑ **New diagnostic capabilities**
- ❑ **Short-course treatment regimens**
- ❑ **Limited set of effective anti-TB meds (cost & availability)**
- ❑ **Changing roles/expectations for public health with health care reform**
- ❑ **Paradox of low incidence**