The other significant trend among TB cases in the US is the steadily increasing proportion of cases among foreign-born individuals. Sixty-three percent of TB cases in 2012 were diagnosed in foreign-born individuals, and the states with higher than the national average TB incidence rates, including New Jersey, are also those with high numbers of foreign-born individuals. Seventy-five percent of the 331 new cases of TB in New Jersey in 2011 were in individuals born outside of the United States. As rates of TB in the United States decline, transmission of TB in the US will continue to decrease, but immigrants from high TB burden countries will continue to be at risk for progression from LTBI to active TB. This risk is particularly amplified in immigrants who are also HIV-infected.

Until recently, there has been little information available on country of origin of those newly diagnosed with HIV infection in the United States. A recently published study of new HIV cases identified from LTBI to active TB. This risk is particularly amplified in immigrants who are also HIV-infected.

Until recently, there has been little information available on country of origin of those newly diagnosed with HIV infection in the United States. A recently published study of new HIV cases in persons born outside the United States and region of origin, 2007–2010 found that 16.2% were born outside of the United States. Of the 81% of these for whom country or region of birth was available, most were from regions of the world where TB rates are much higher than in the United States: 15% were from Africa and 51% from Central or South America (Figure 3). Thus despite an overall decline in TB in the US, TB and HIV-TB co-infection will continue to be issues among immigrant communities, groups with traditionally poorer access to health care.

From global to local: TB and HIV-TB co-infection in the United States

There were less than 10,000 new cases of TB reported in the United States in 2012, the 20th consecutive year of declining cases. The 2012 TB incidence is an all-time low of 3.2 new cases per 100,000 population. For comparison, new case rates in 2011 were 75 cases per 100,000 in China, 181 per 100,000 in India, and 995 per 100,000 in South Africa. Approximately 7.7% of new TB cases in the United States were in individuals co-infected with HIV, but the rate of co-infection increases to 10% in the 25–44 year age cohort.

Rates of screening for HIV infection among new TB cases continue to improve: 90% of new TB cases in the 25–44 year age cohort were HIV tested in 2011. Although mortality among patients with TB and HIV has decreased substantially in the United States since ART became widely available and the number of HIV co-infected TB cases in the United States is relatively low, mortality of co-infected patients is 4-fold higher than for un-infected. This is similar to TB mortality differences between HIV-infected and uninfected individuals from other parts of the world.

Figure 3: New HIV infections in persons born outside the United States and region of origin, 2007–2010