

2016-2017 High MDR/RR-TB Burden Countries **(multidrug (INH and rifampin) resistant/rifampin resistant)**



Determining the end of an infectious period is a critical decision TB program staff is continually depended upon to make. In *Controlling TB in the United States (2005)* one of several criteria to consider when making that decision is a question of whether or not drug resistance is likely. All patients with suspected (or proven) drug resistant TB should be subjected to more stringent criteria to declare absence of infectivity and subsequent release from airborne isolation. The guidance below expects us to consider the confidence we have in the effectiveness of the regimen chosen to cure a patient's TB disease based on the possibility of resistance.

“Patient has negligible likelihood of multidrug-resistant TB, no known exposure to multidrug-resistant tuberculosis and no history of prior episodes of TB with poor compliance during treatment” (Controlling TB in the United States, 2005, page 9, Box 3, bullet 1)

Truly predicting who may or may not have drug resistant disease is impossible. However, knowing the burden of MDR/RR in the country of origin of the TB patient can assist with building a case for justifiable concern of increased likelihood of resistance until drug sensitivity results are available.

The countries below have an estimated percentage of new cases with MDR/RR-TB of $\geq 3\%$. Countries with $< 3\%$ burden but included are of concern in Virginia and identified by an*. Countries with the largest numbers of MDR/RR-TB cases (45% of the global total) are China, India and the Russian Federation (*Edited from 2016 World Health Organization Global Tuberculosis report*)

Azerbaijan	Mozambique	Russian Federation
Belarus	Myanmar (Burma)	Somalia
Burma (Myanmar)	Nigeria	South Africa
China	Pakistan	Tajikistan
Congo (Democratic Republic of)	Papua New Guinea	Ukraine
Ethiopia*	Peru	Uzbekistan
India*	Philippines*	Vietnam
Kazakhstan	Republic of Moldova	Zimbabwe
Kyrgyzstan		

Virginia: *Between 2010 and 2015 Virginia reported a total of 120 cases with resistance to one or more first line TB medications. Eleven of those cases were diagnosed with MDR /TB and none had XDR-TB (Resistance to INH, Rifampin, aminoglycosides and fluoroquinolones). Some locally identified countries of concern were added to the list above. The Continents of Africa and Asia are most affected. If a Virginia client is from one of these continents, consider the possibility of their risk above average even if their country of origin is not listed above.*