



PATHOGENIC MICROBIOLOGY AND EMERGING BIOTHREATS

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Classical Biological Weapon Threats

































XDR-TB

- High fatality rate. There is very little to be done about it. In a South African population of 53 people with XDR-TB, 52 died. The median survival time after diagnosis was 16 days.
- There are an estimated 450,000 cases per year of MDR-TB with a fatality rate of 67 percent.
- XDR-TB is the worst of all, it's already been reported in 17 countries and is estimated to be 10 percent of all MDR cases. This means there are 45,000 people with XDR-TB worldwide.







Potential Directions of Terrorist 🔰 iodefense **BW** Development George Mason University

"Reverse" engineering

National

- Virulent strain may not be necessary to create a pathogen. Live vaccines or related strains can be used as vectors
- Manipulations with substitute agents
 - May be sufficient for terrorist purposes
 - Represent an essential step in BW development
 - Easy to manipulate with
 - Psychological impact of attack can be high









