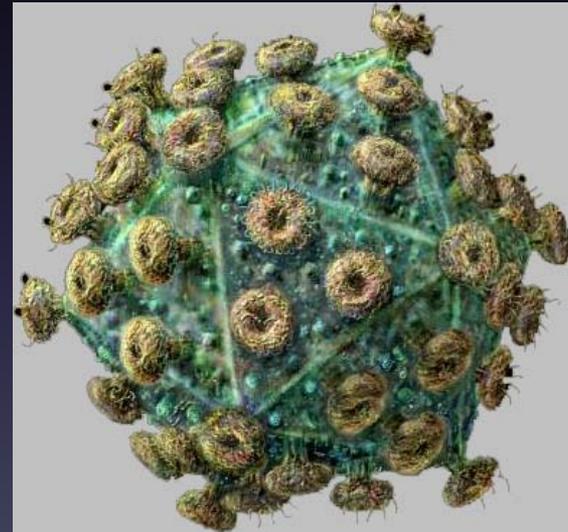


## HIV & TB : THE ODD COUPLE



Felipe Gutierrez MD, MPH  
Infectious Diseases Section Chief  
Phoenix VA Health System



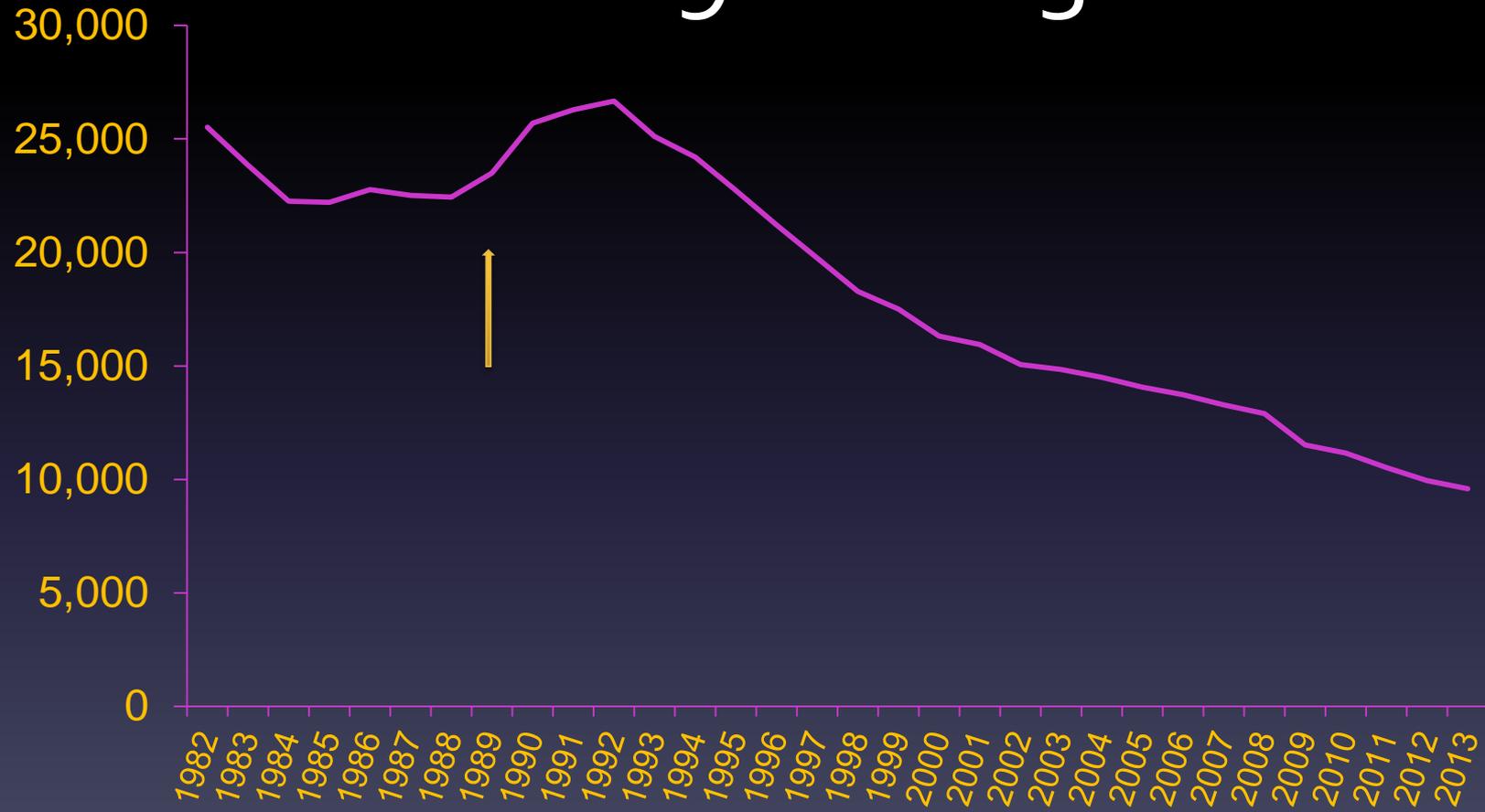
The background of the entire image is a close-up, blue-tinted photograph of several interlocking metal gears. The gears are arranged in a circular pattern, with the teeth of one gear meshing with the teeth of the adjacent gear. The lighting creates strong highlights and deep shadows, emphasizing the metallic texture and the mechanical nature of the scene.
$$1 + 1 = 3$$



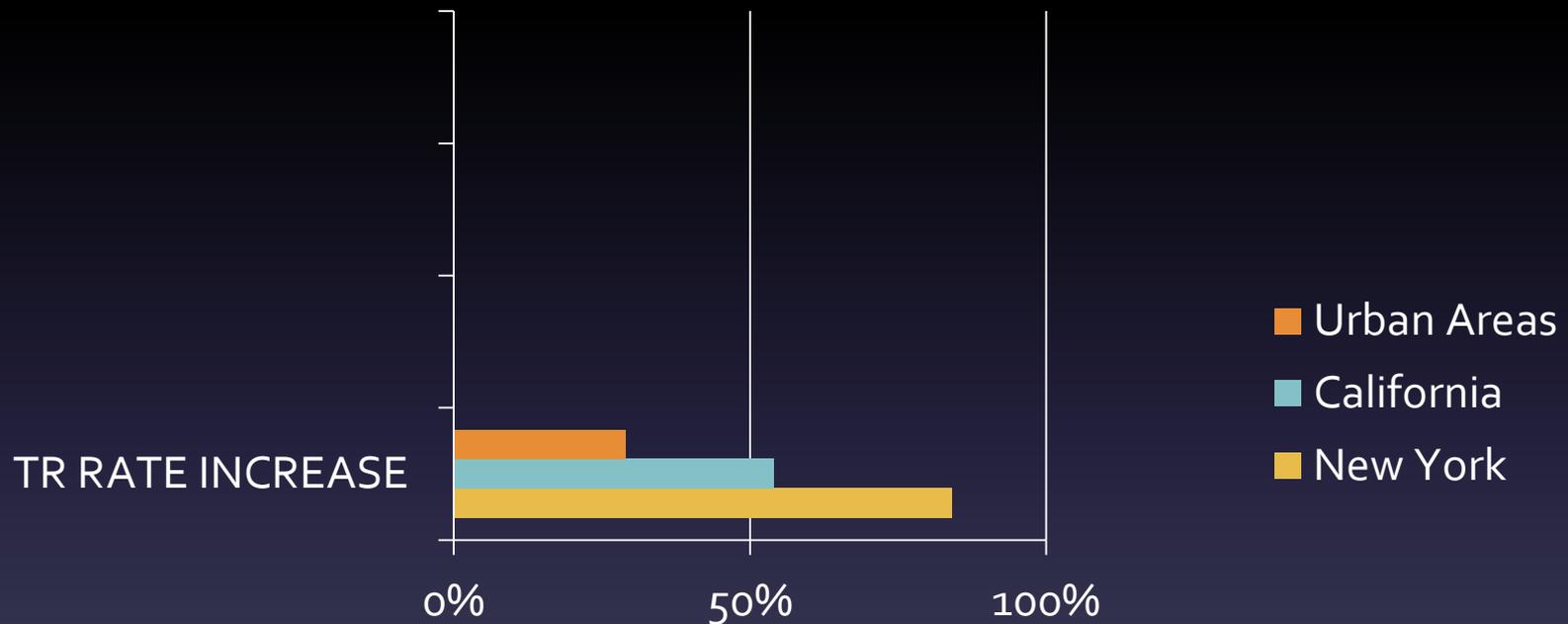
# HIV/TB SYNDEMIC

- Urbanization
- Poverty
- Migration
- Increased susceptibility

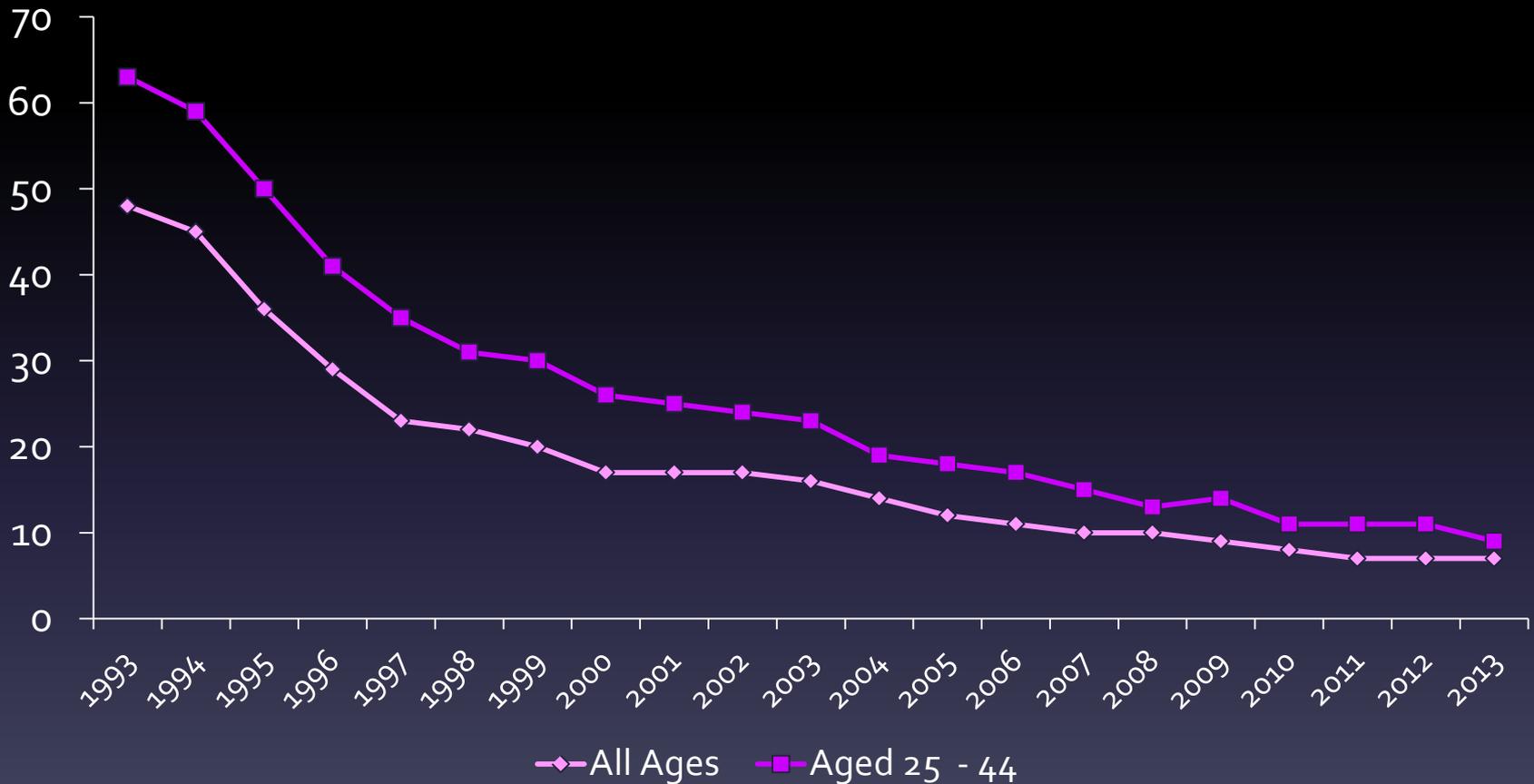
# Reported TB Cases US 1982-2013



# Increase in Rates of TB US 1985-1992



# Estimated % HIV/TB Coinfection US 1993-2013

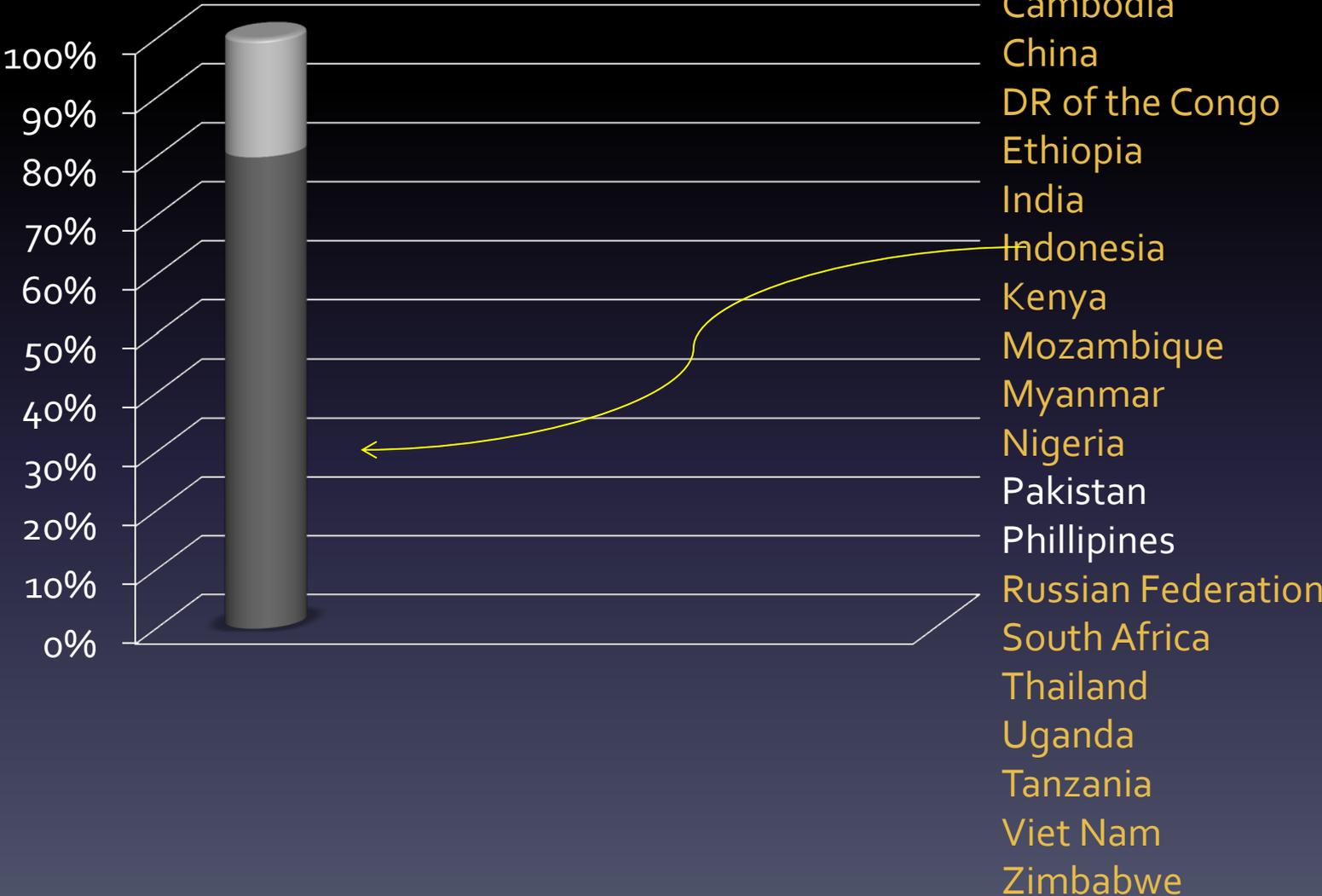




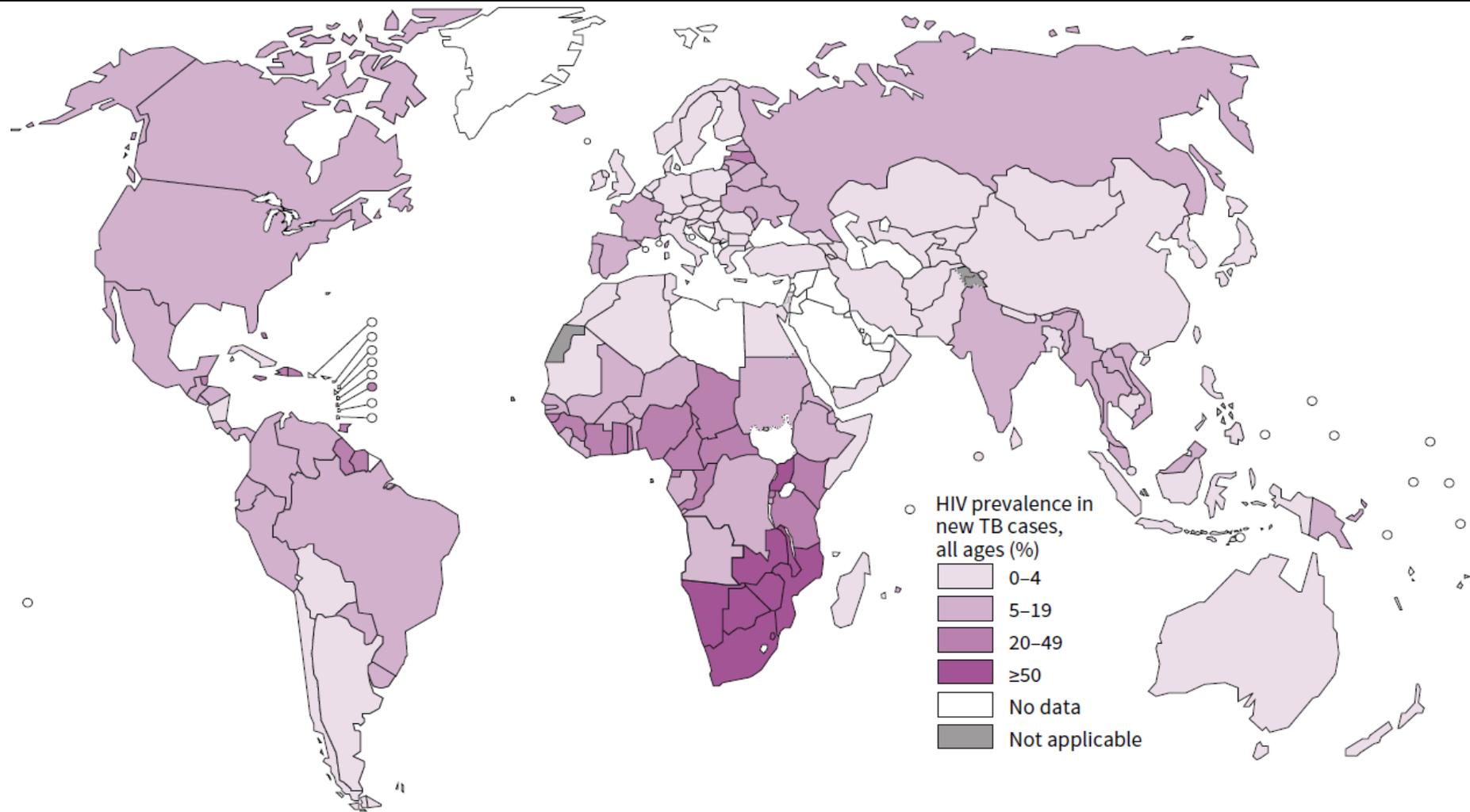
# GLOBAL EPIDEMIOLOGY

# High Burden Countries (HBC)

## TB CASES WORLDWIDE

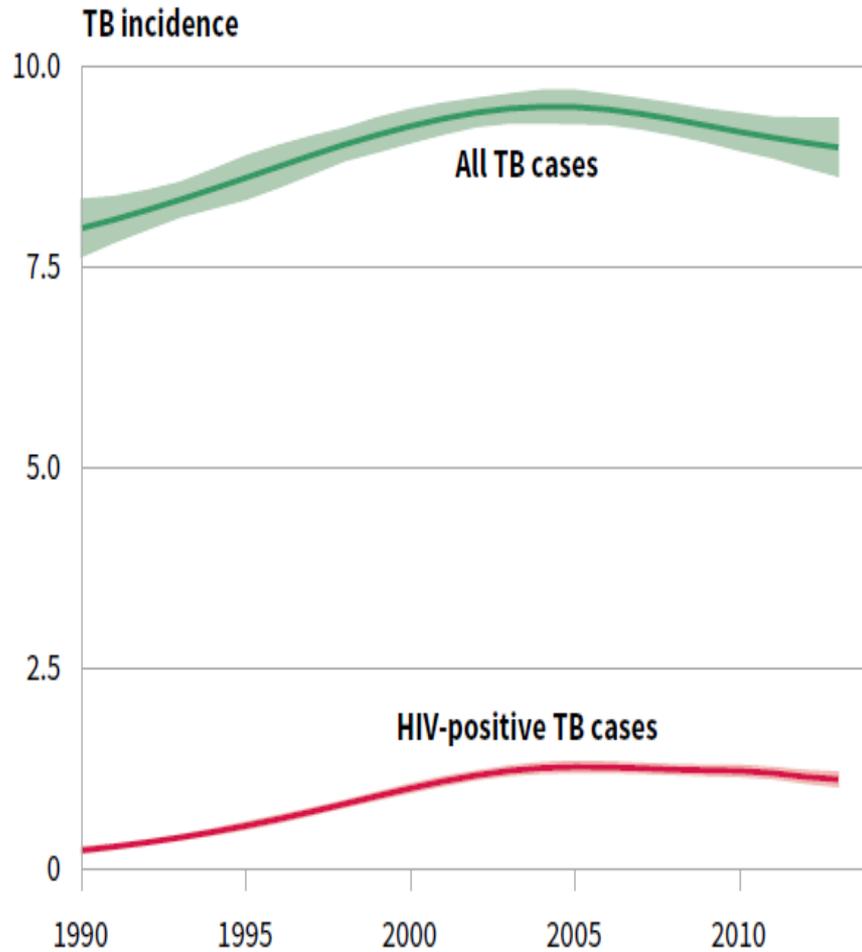


# HIV Prevalence Among New TB Cases

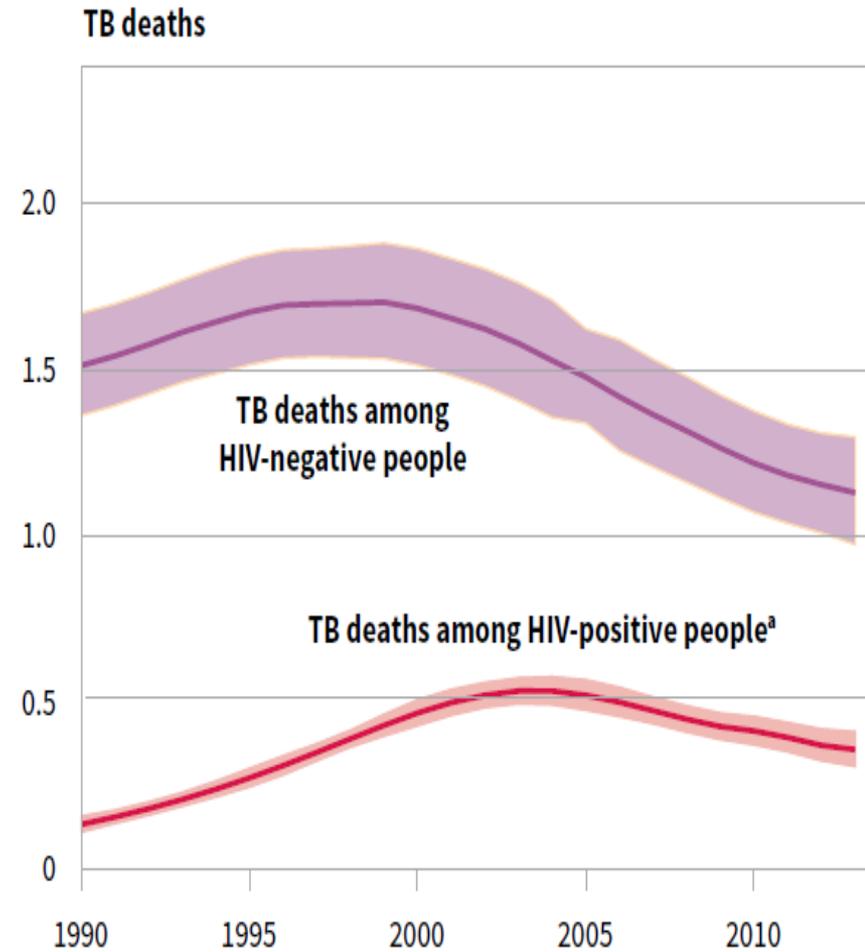


# Global Impact of HIV/TB

Millions



Millions





# PATH TO SUCCESS

- HIV TESTING
- ACCESS TO INH
- ACCESS TO ART
- IDENTIFICATION OF CASES



# TREATMENT CHALLENGES FOR THE CLINICIAN

# Immune Reconstitution Inflammatory Syndrome (IRIS)

- Paradoxical exacerbation of infectious process after initiation of antiretroviral therapy (ART)
- Immune mediated process
- Timing of ART
- Management options



# TB-ART DRUG INTERACTIONS

- Theoretical vs Practical
- Rifamycins
  - Cytochrome P<sub>450</sub> induction
- Resources
  - Local TB Program
  - CDC 2013 Publication
    - “Managing Drug Interactions in The Treatment of HIV-Related Tuberculosis”
  - TB Referral Centers
    - Heartland National TB Center
    - National Jewish
    - Curry International TB Center



QUESTIONS?