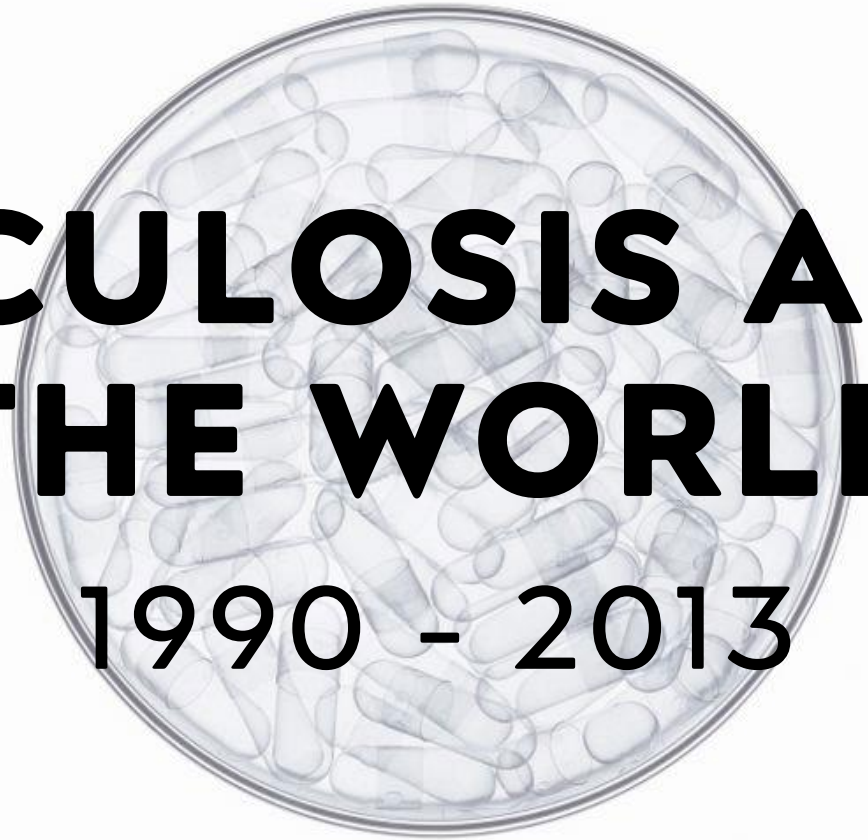
TUBERCULOSIS AROUND THE WORLD

1990 - 2013



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OBJECTIVE

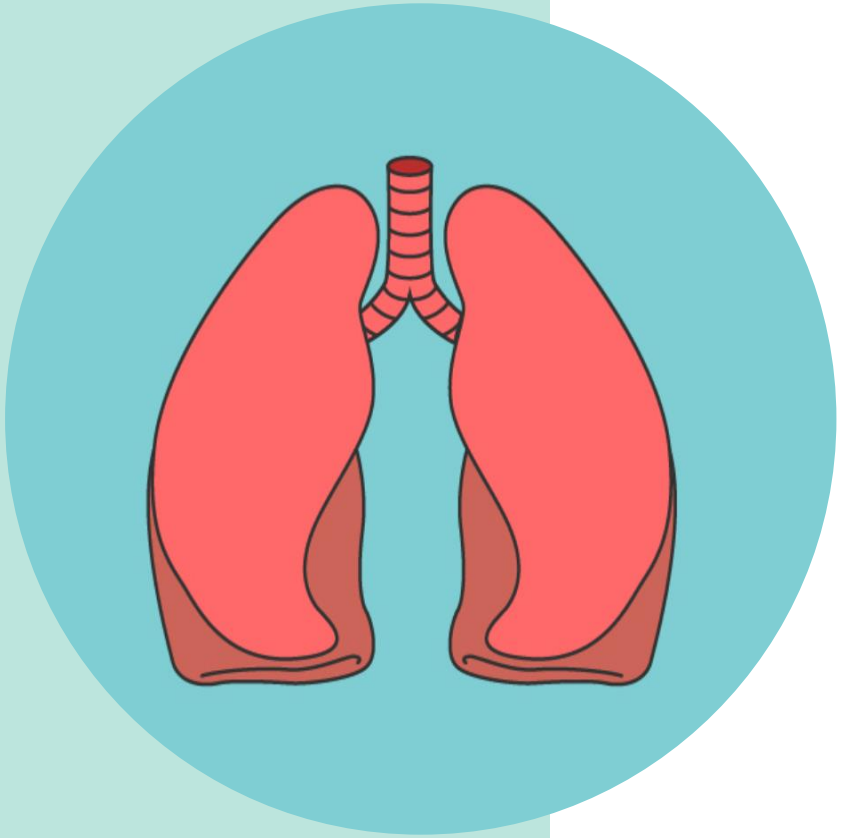
- INVESTIGATE WORLDWIDE TUBERCULOSIS DATA (1990 – 2013) TO UNDERSTAND WHICH COUNTRIES WHICH HAVE IMPROVED TUBERCULOSIS STATISTICS
- USE TO INFORM PUBLIC HEALTH RESEARCH FOR TUBERCULOSIS BEST PRACTICES

QUESTIONS

1. HOW HAS TUBERCULOSIS CHANGED AROUND THE WORLD OVER TIME?

2. IN WHICH COUNTRIES HAS TUBERCULOSIS IMPROVED?

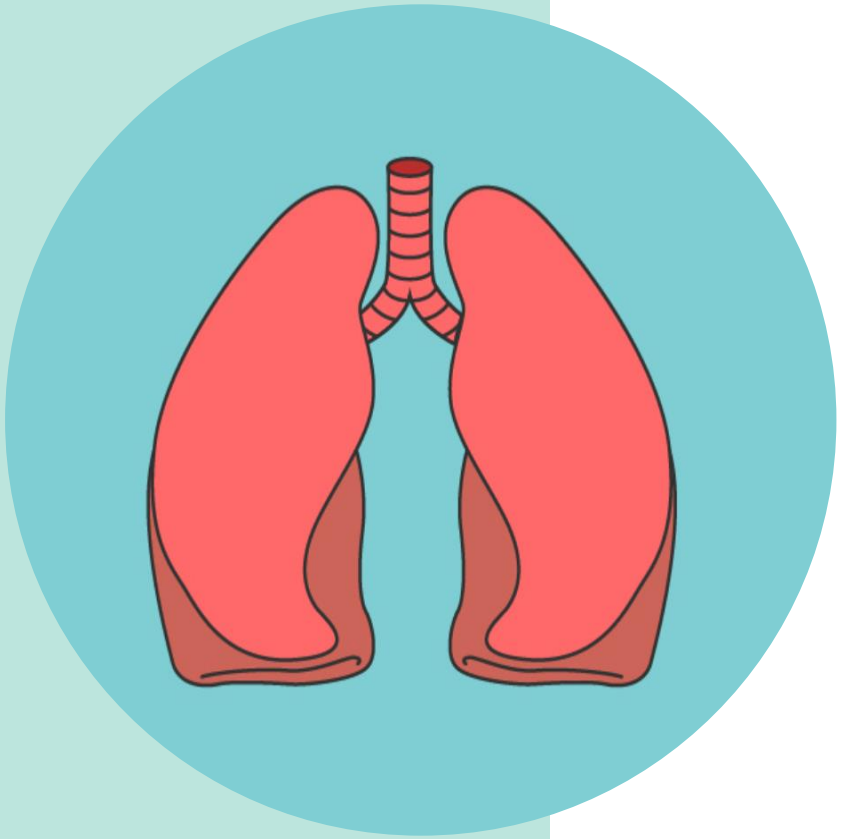
- REDUCED DEATH RATES
- REDUCED CASES
- IMPROVED CASE DETECTION



DATA OVERVIEW

- 1990 – 2013

- Tuberculosis stats for every country, including:
  - Prevalence
  - Deaths
  - Incidence
  - Case detection rate



DATA OVERVIEW

- All stats are presented by in cases/100K population and overall
- All stats are presented by cases without HIV-positivity and cases with HIV-positivity

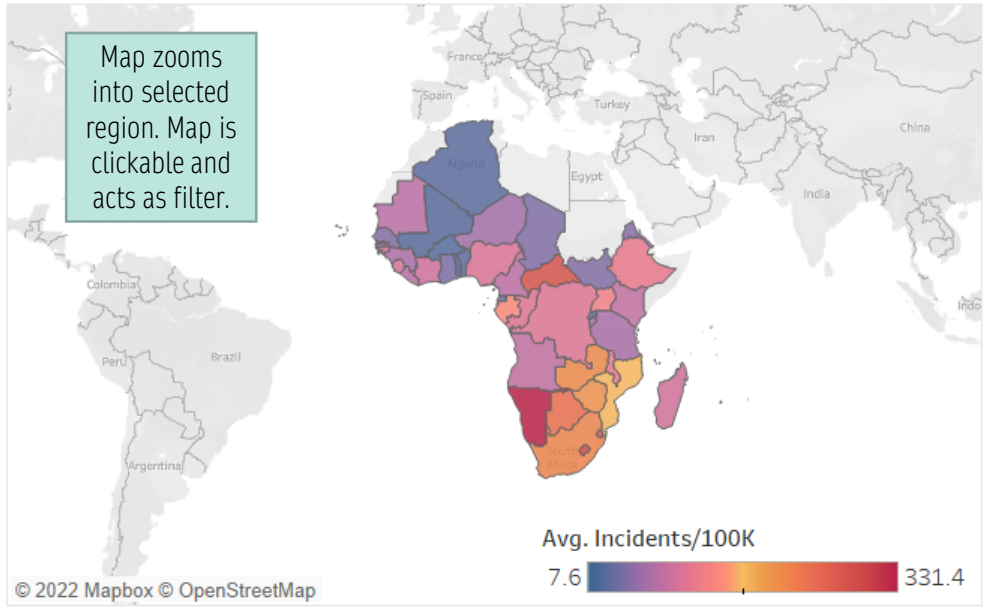
Prevalence vs Incidence

- Prevalence – number of cases *during* a given time period
  - Changes when people are cured or die
- Incidence – number of new cases in a given time period

DASHBOARD #1
Global Tuberculosis Trends 1990 - 2013

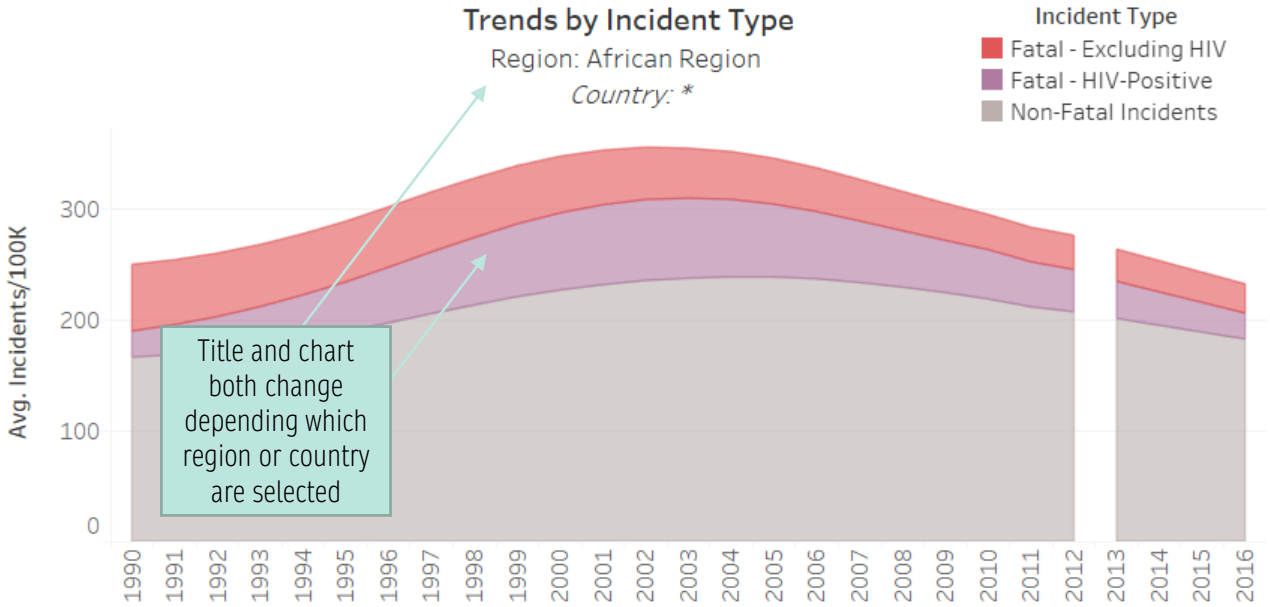
TUBERCULOSIS
1990 - 2013

Tuberculosis Incidents Around the World



Trends by Incident Type

Region: African Region
*Country: **



Filter for HIV or non-HIV fatalities

Fatality Type

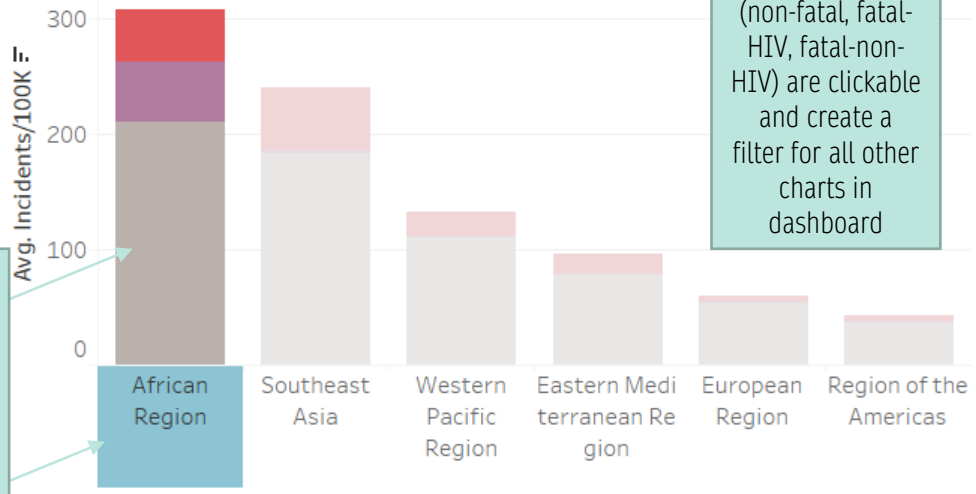
(All)

Timeframe (3 Years)

(All)

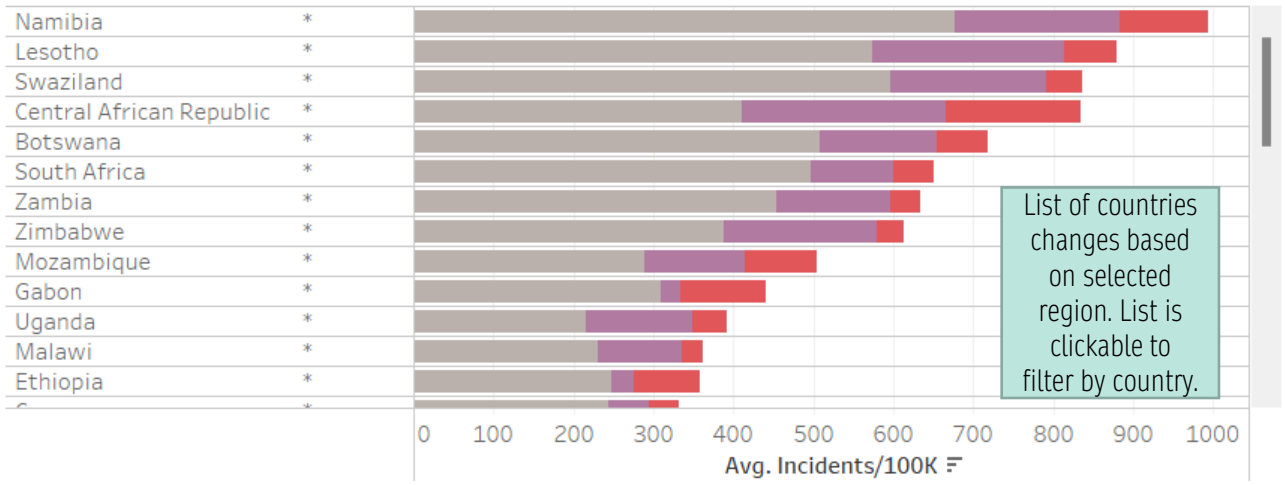
Can filter by year using slide filter (3 year groups for simplicity)

Incidents By Type and Region



Can click 'African Region' to filter for all African incidents, or one section of stacked bar chart to look at only specific incident type.

Countries with Most Tuberculosis

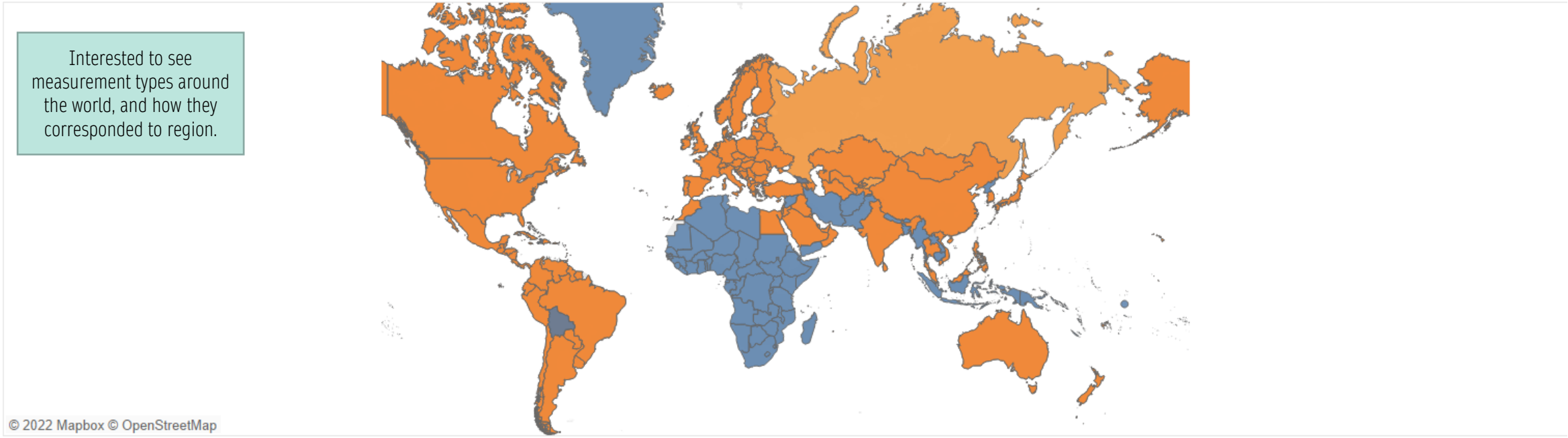


Global Tuberculosis Trends 1990 - 2013

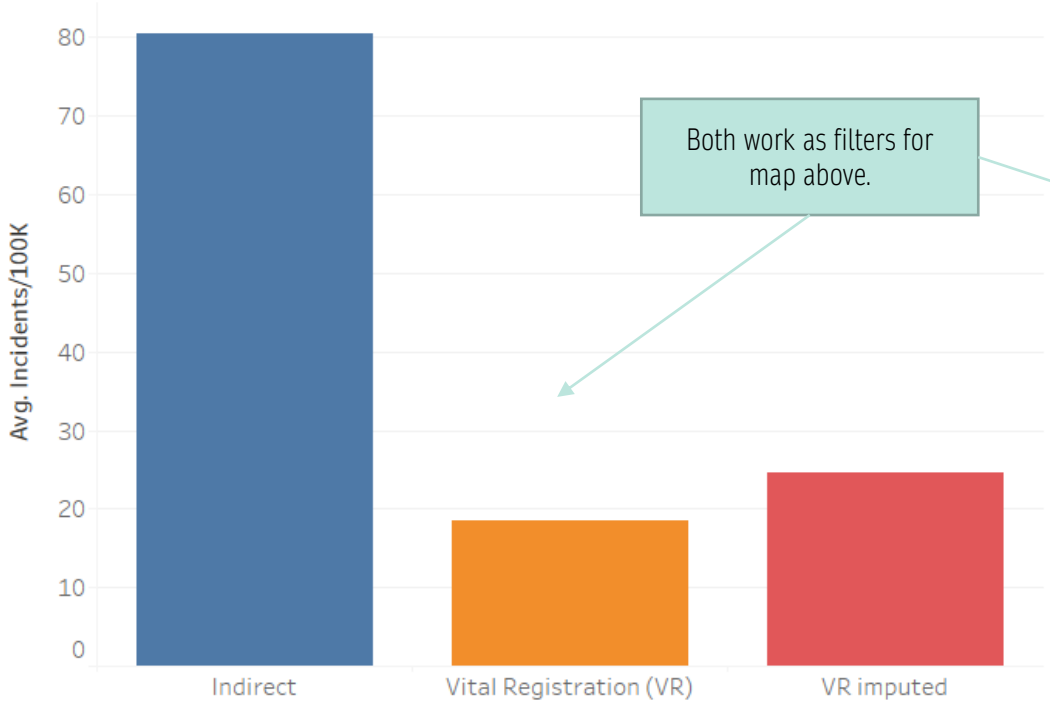
DASHBOARD #2
Measurement Estimation Methods

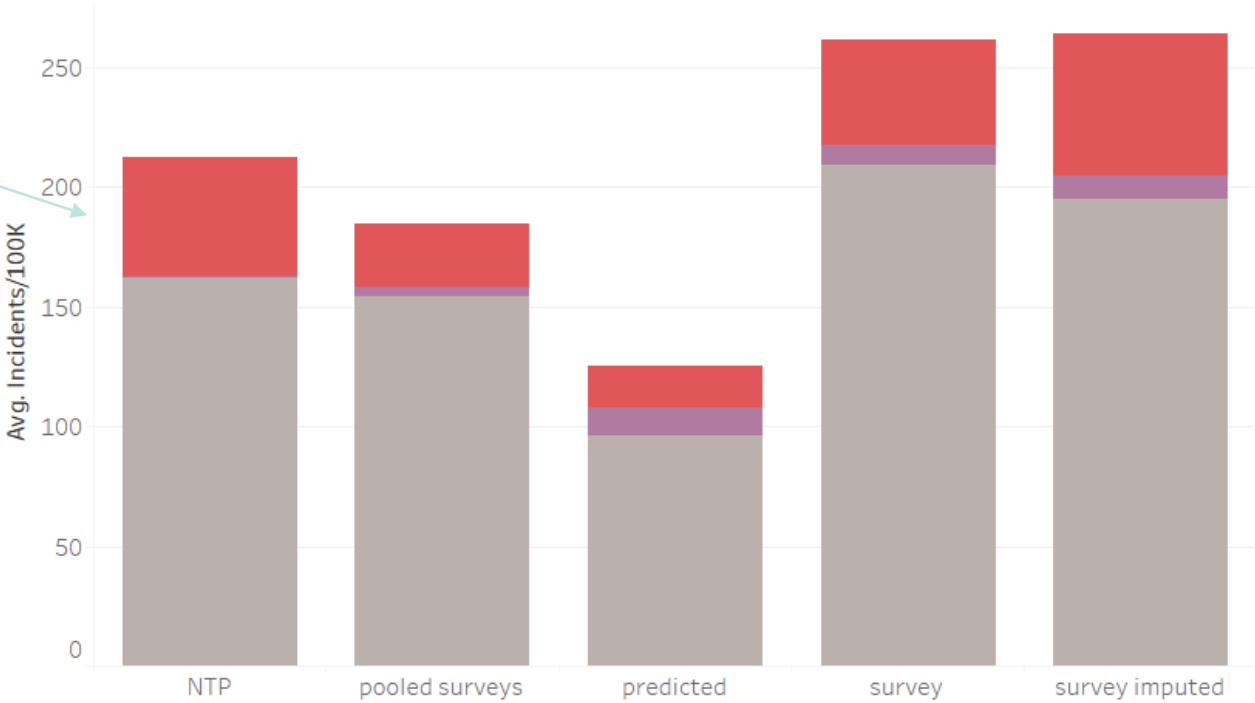
Measurement Estimation Methods

Interested to see measurement types around the world, and how they corresponded to region.

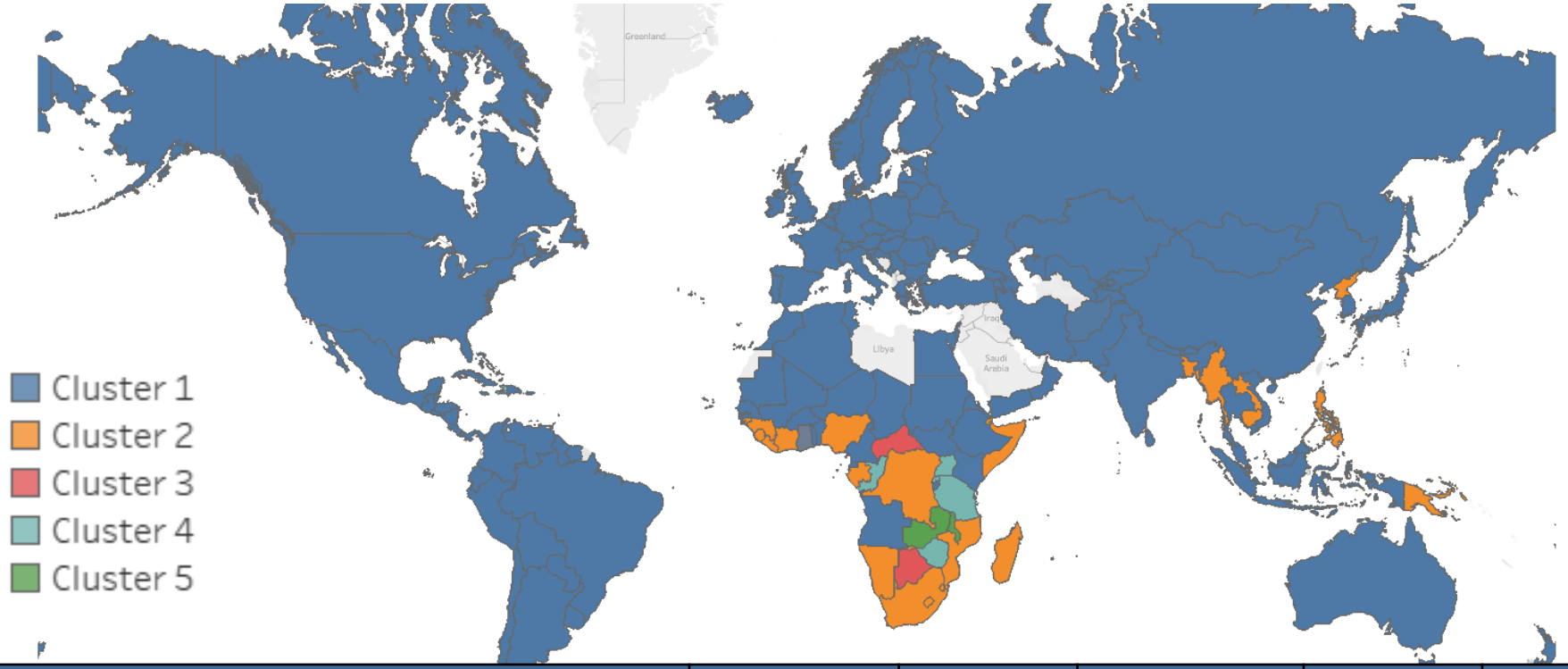


Both work as filters for map above.

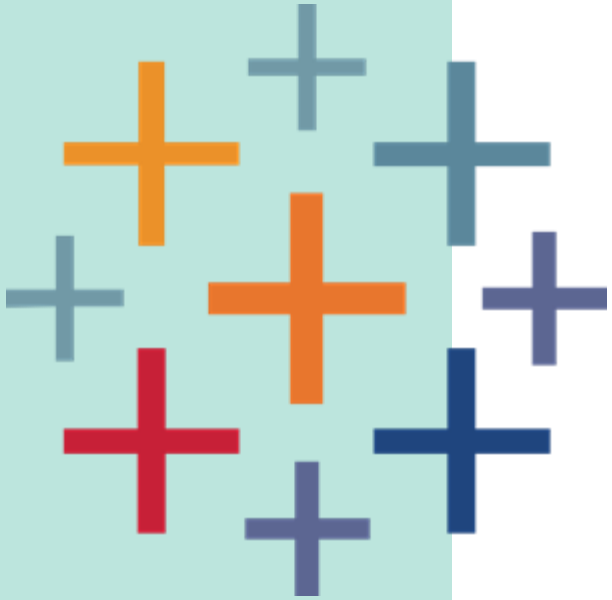




CLUSTER ANALYSIS



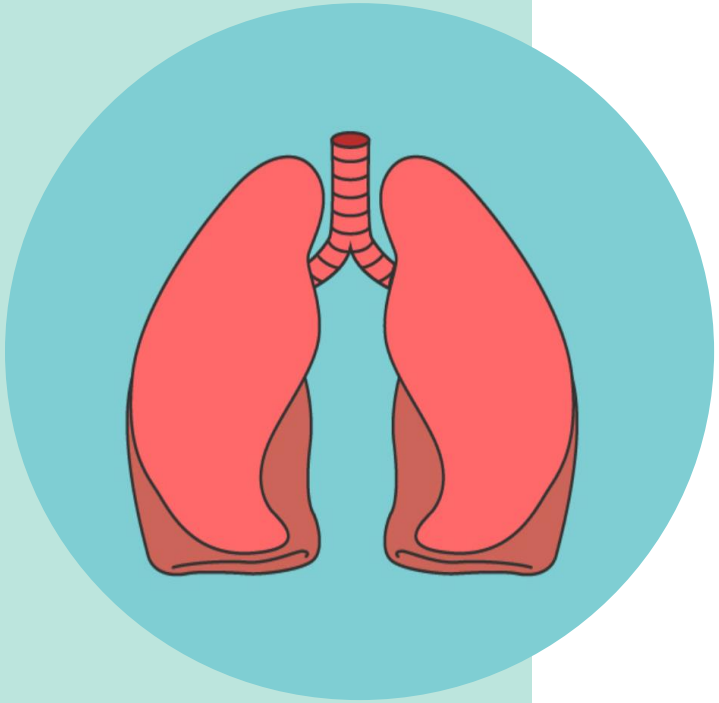
Attribute	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Number of Items	6761	1821	322	1397	634
Avg. Estimated total population number	39,112,000	79,100,000	9,605,300	13,154,000	13,828,000
Avg. Number of Incidents/100K Population	19	101	253	47	224
Sum of Estimated HIV in incident TB (percent)	3.8	5.0	16.4	29	64
Sum of Estimated prevalence of TB (all forms) per 100 000 population	91.2	522	1246	203	520
Sum of Estimated mortality of TB cases (all forms, excluding HIV) per 100 000 population	6.8	63.5	152.2	24.4	47.8
	Countries with low rates of tuberculosis	Countries with high tuberculosis and low HIV	Countries with high rates of tuberculosis	Medium tuberculosis, medium HIV	Countries with high rates of HIV



KEY LEARNINGS (ABOUT TABLEAU!)

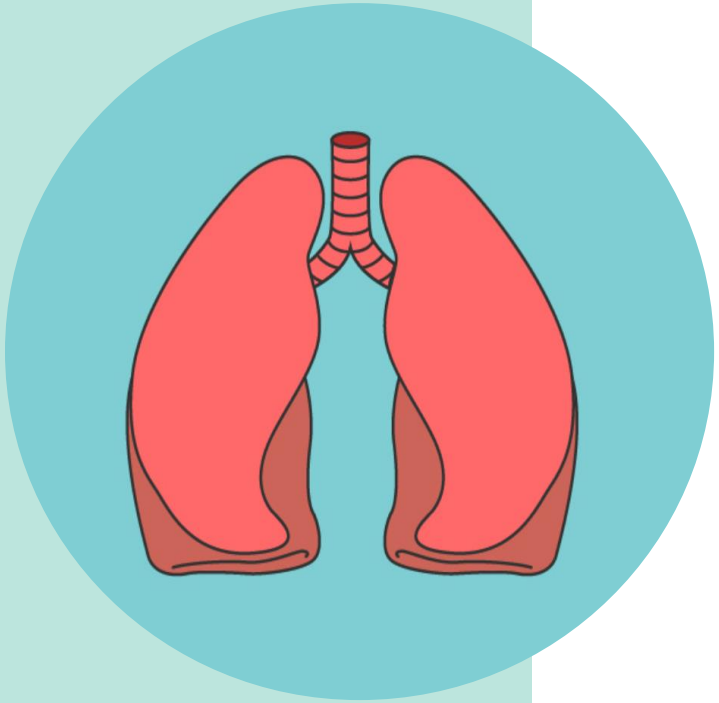
- Data needs to be set up as unpivoted
- Unpivoted table separately and joined with existing data
- Helpful to have unrelated variable to make comparisons – e.g., having GDP would have been helpful
- LOD Statements and order of filtering is critical to get the result you want!

KEY LEARNINGS (ABOUT TUBERCULOSIS)



- Between 1990 and 2013, tuberculosis cases in Africa surpasses those in Southeast Asia
- From 1993 onwards, tuberculosis rates have been significantly higher in the African Region than elsewhere
- Many tuberculosis deaths in Africa are associated with HIV-positivity, this is uncommon elsewhere

KEY LEARNINGS (ABOUT TUBERCULOSIS)



- Djibouti, Namibia, Uganda, and South Africa are all consistently in the top 5 countries with the most tuberculosis
- Cambodia is the only country outside of the African Region which consistently is in the top 5 countries with the most tuberculosis