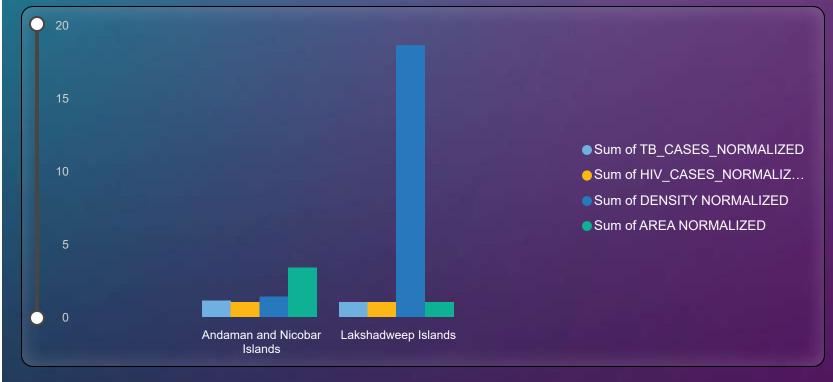


# TB Cases Influencers in Arabian Sea & Bay of Bengal Zone

#### Based on collected EDA we found out that in these zones:

- 1. When the total population increases by 158,054, on average, there is a growth of 62.46 TB cases.
- 2. When the total Health Index Decrease by 3.57, on average, there is a growth of 62.46 TB cases.
- 3. When the total number of HIV cases increases by 213, on average, there is a growth of 62.46 TB cases.
- 4. When the total population density decreases by 983.50, on average, there is a growth of 62.46 TB cases.

These relationships suggest that there are positive associations between these factors and the occurrence of TB cases. However, it's important to note that these statements are presented as hypothetical examples, and the actual relationships between these variables may vary depending on specific contexts and other factors that may influence TB transmission and prevalence.







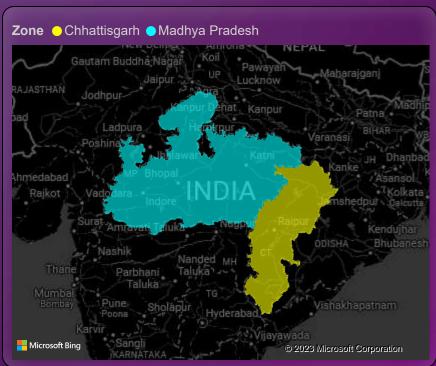
# **TB Cases Influencers in Central Zone**

### Based on collected EDA we found out that in these zones:

- 1. Population Impact: A substantial increase in the total population, specifically by 23,540,805.50, leads to a notable average growth of 17,079.55 TB cases.
- 2. Health Index Influence: With an fall in the Health Index by 6.99, we observe an average growth of 17,079.55 TB cases.
- 3. Density Effect: As population density rises by 23.00, on average, we see a corresponding growth of 17,079.55 TB cases.
- 4. HIV Relationship: Notably, an increase in the total number of HIV cases by 7,573.00 corresponds to an average growth of 17,079.55 TB cases.

In summary, these findings suggest strong associations between population, health index, density, and HIV cases with the incidence of TB. A substantial increase in any of these factors leads to an average growth of 17,079.55 TB cases.







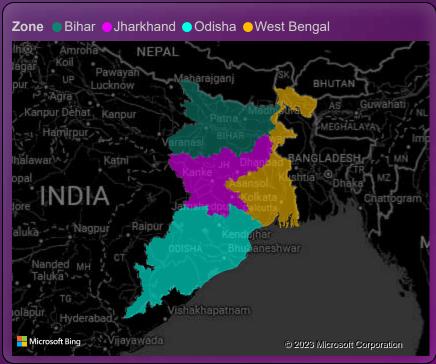
# TB Cases Influencers in Central Zone

#### Based on collected EDA we found out that in these zones:

- 1. Population Impact: A substantial increase in the total population, specifically by 30608125.66, leads to a notable average growth of 6675.25 TB cases.
- 2. Health Index Influence: With a growth in the health index by 7.16, we observe an average growth of 2482.34 TB cases. (Based on 75 % Data)
- 3. Density Effect: As population density rises by 366.51, on average, we see a corresponding growth of 16197.22 TB cases.
- 4. HIV Relationship: Notably, an increase in the total number of HIV cases by 23746 corresponds to an average growth of 17284 TB cases.

In summary, these findings suggest strong associations between population, area, density, and HIV cases with the incidence of TB. A substantial increase in any of these factors leads to an average growth of TB cases.







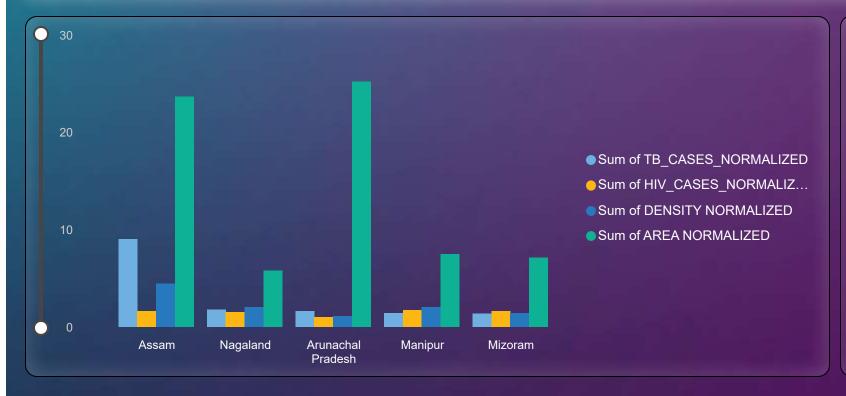
### TB Cases Influencers in North East Zone

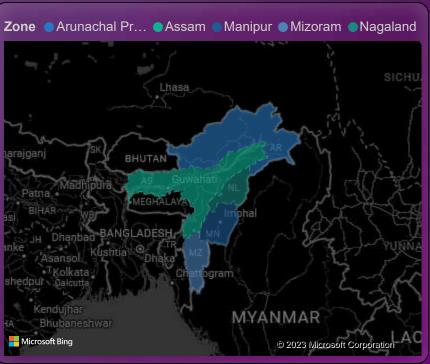
(Including: Arunachal Pradesh, Assam, Nagaland, Manipur, and Mizoram)

### Based on collected EDA we found out that in these zones:

- 1. Population Impact: A substantial increase in the total population, specifically by 11790154.64, leads to a notable average growth of 8851.04 TB cases.
- 2. Health Index Influence: With a growth in the health index by 17.37, we observe an average growth of 11336.62 TB cases.
- 3. Density Effect: As population density rises by 1133.92, on average, we see a corresponding growth of 6126.99 TB cases.
- 4. HIV Relationship: Notably, an decrease in the total number of HIV cases by 9797.29 corresponds to an average growth of 2293.29 TB cases.

In summary, these findings suggest strong associations between population, area, density, and HIV cases with the incidence of TB. A substantial increase in any of these factors leads to an average growth of TB cases. Where HIV Cases decrease is showing negative correlation with number cases TB cases.







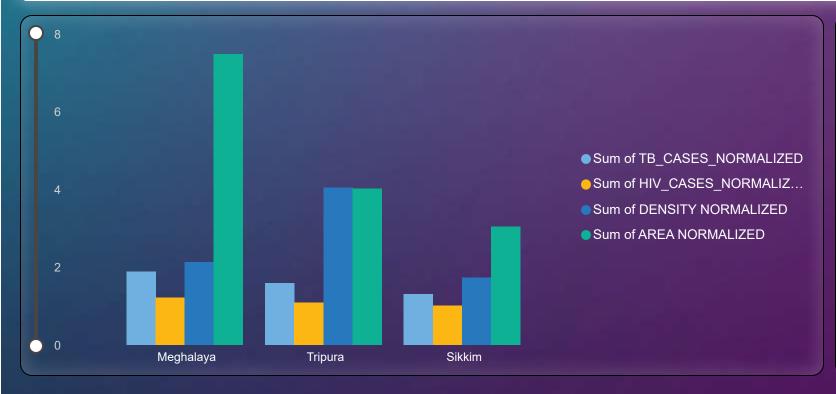
### TB Cases Influencers in North East Zone

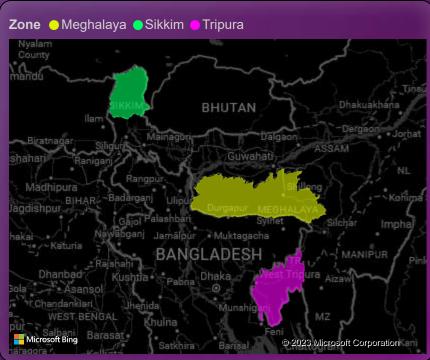
(Including: Meghalaya, Sikkim and Tripura)

### Based on collected EDA we found out that in these zones:

- 1. Population Impact: A substantial increase in the total population, specifically by 1309628.73, leads to a notable average growth of 402.28 TB cases.
- 2. Health Index Influence: With a fall in the health index by 11.08, we observe an average growth of 213.49 TB cases.
- 3. Density Effect: We did not find proper correlation for density influence,
- 4. HIV Relationship: Notably, an decrease in the total number of HIV cases by 3388.56 corresponds to an average growth of 730.58 TB cases.

In summary, these findings suggest strong associations between population, area and HIV cases with the incidence of TB. A substantial increase in any of these factors leads to an average growth of TB cases. Where Health Index is showing negative correlation with number cases TB cases.







### TB Cases Influencers in Northern Zone

(Including: 4 UTs and other Northern States)

### Based on collected EDA we found out that in these zones:

- 1. Population Impact: A substantial increase in the total population, specifically by 61916315.06, leads to a notable average growth of 84512.79 TB cases.
- 2. Health Index Influence: With a fall in the health index by 10.09, we observe an average growth of 18563.36 TB cases.
- 3. Density Effect: With a fall in the density by 4315.53, we observe an average growth of 8321.32 TB cases.
- 4. HIV Relationship: Notably, an increase in the total number of HIV cases by 55090.86 corresponds to an average growth of 66507.96 TB cases.

In summary, these findings suggest strong associations between population, area and HIV cases with the incidence of TB. A substantial increase in any of these factors leads to an average growth of TB cases. Where Health Index is showing negative correlation with number cases TB cases.

