
Covid-19: A Quick Overview to The Current Pandemic

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Covid – 19: Disease Overview

Background Information

Name

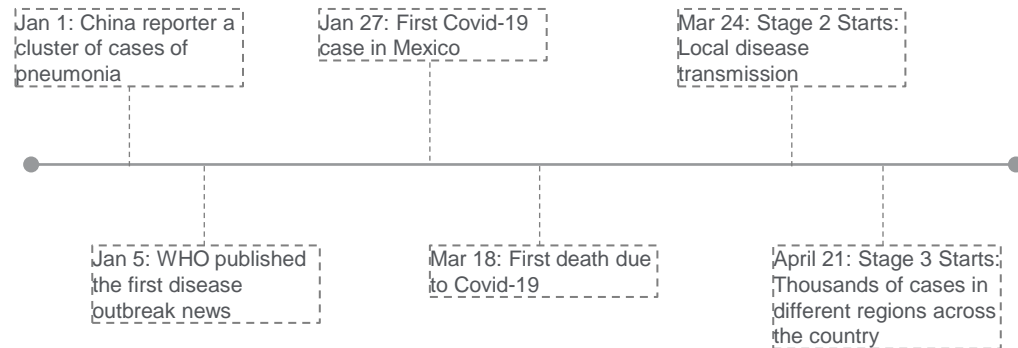
- Virus: SARS-COV-19
- Disease:

CO
Corona
Virus
VID
Disease
19
2019

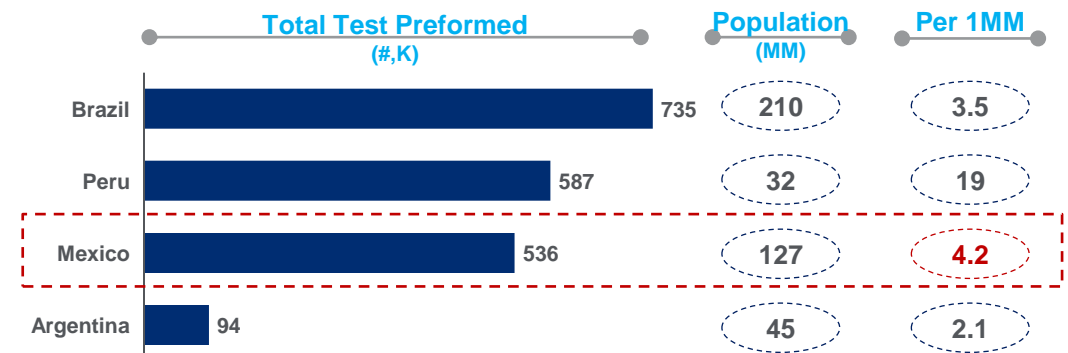
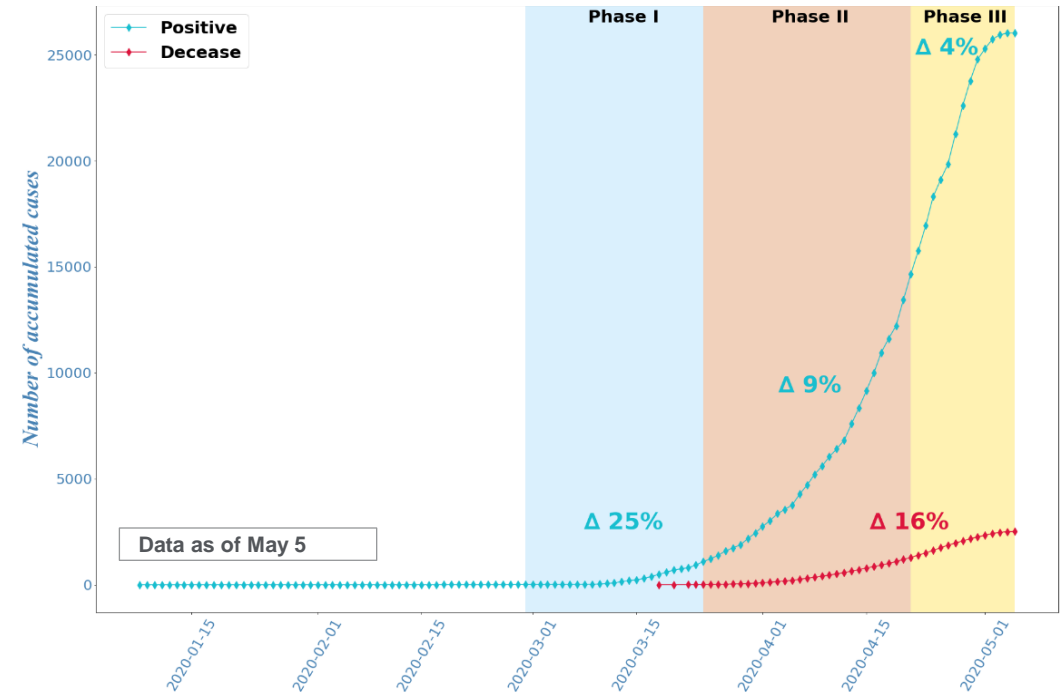
Transmission

- Spreads through droplets when we sneeze, cough or speak
- Can enter us directly through our eyes nose or mouth
- The virus can also live on a lot of surfaces for hours so anyone can pick it up on their hands and infect themselves when touching their face (~500 times a day)
- You can be infected and not have any symptoms

Disease Timeline Summary:

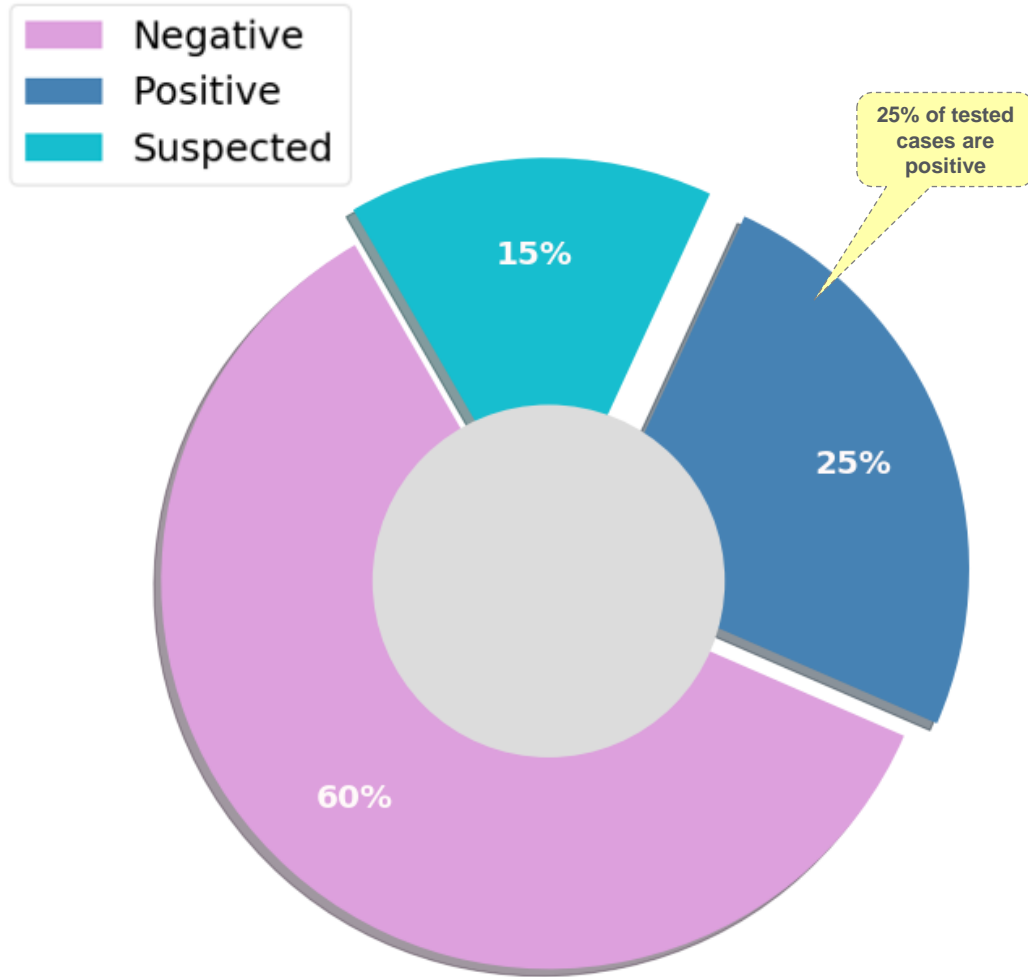


Covid-19 Current Rate of Transmission of 4%



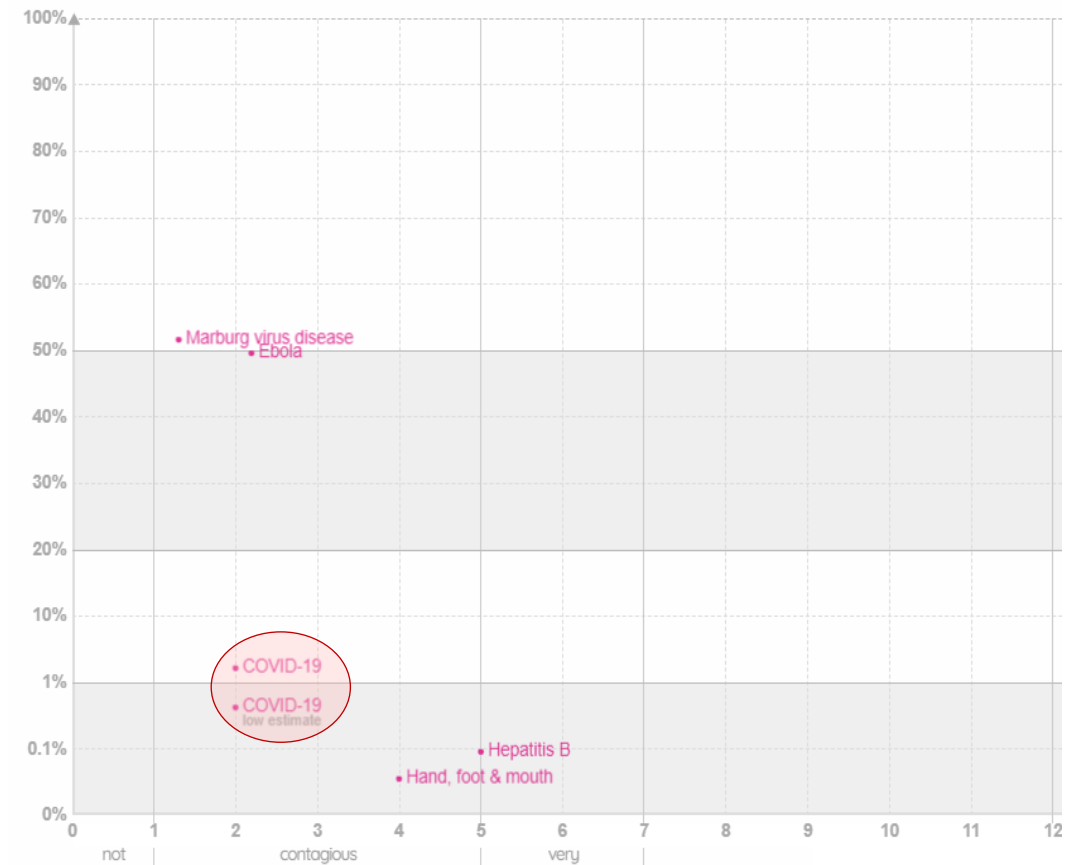
Covid – 19: How Contagious It Can Be?

Covid-19 Cases Distribution



Is it More Contagious than Other Pandemics?

As of today it is not clear yet, it is deadlier than **Measles** but less contagious. Far less deadly than **Ebola** but no were near **Smallpox**

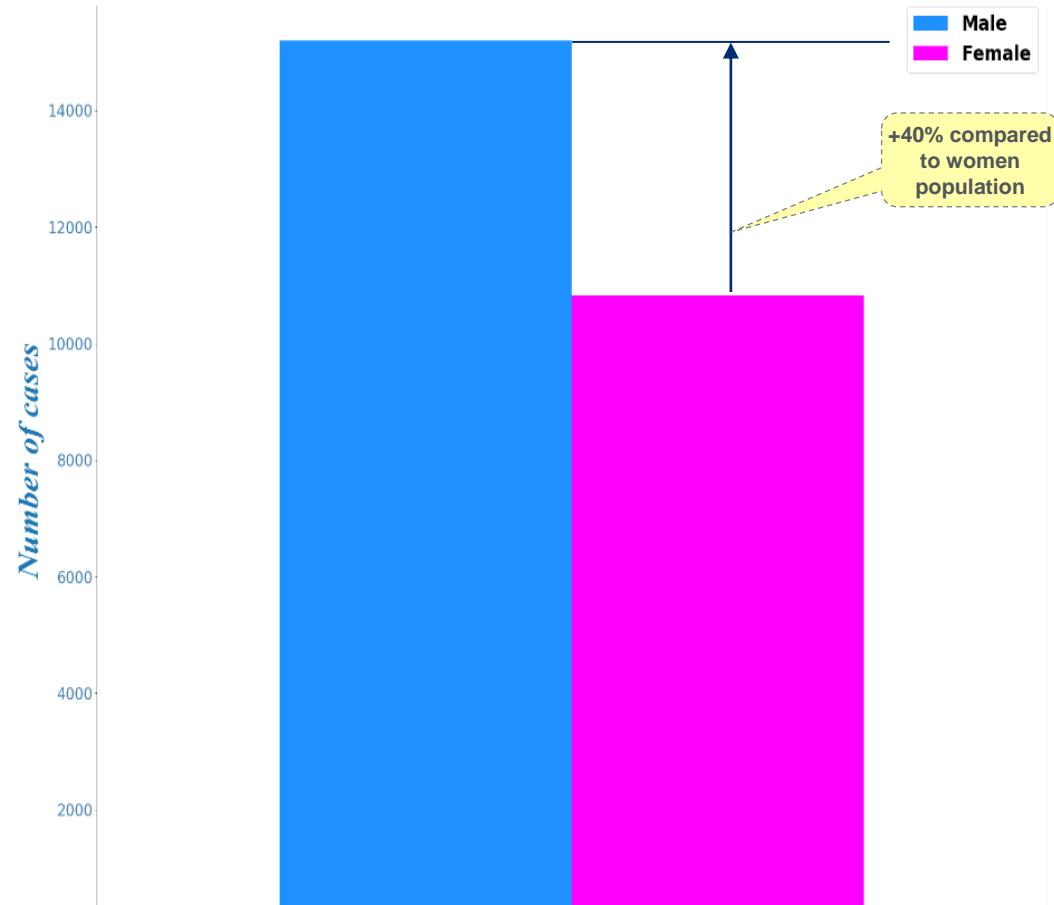


Source: information is beautiful. (2020). *The MicrobeScope – Infectious Diseases in Context*. [Scatter Plot Visualization]. [informationisbeautiful.net](https://informationisbeautiful.net/visualizations/the-microbescope-infectious-diseases-in-context/).

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Covid – 19: No Clear Answer as to Who is More Prone to Get Infected

Women or Men?



There is **no clear understanding** why the risk is higher for men.

Some hypothesis are:



- **Biological Factors**



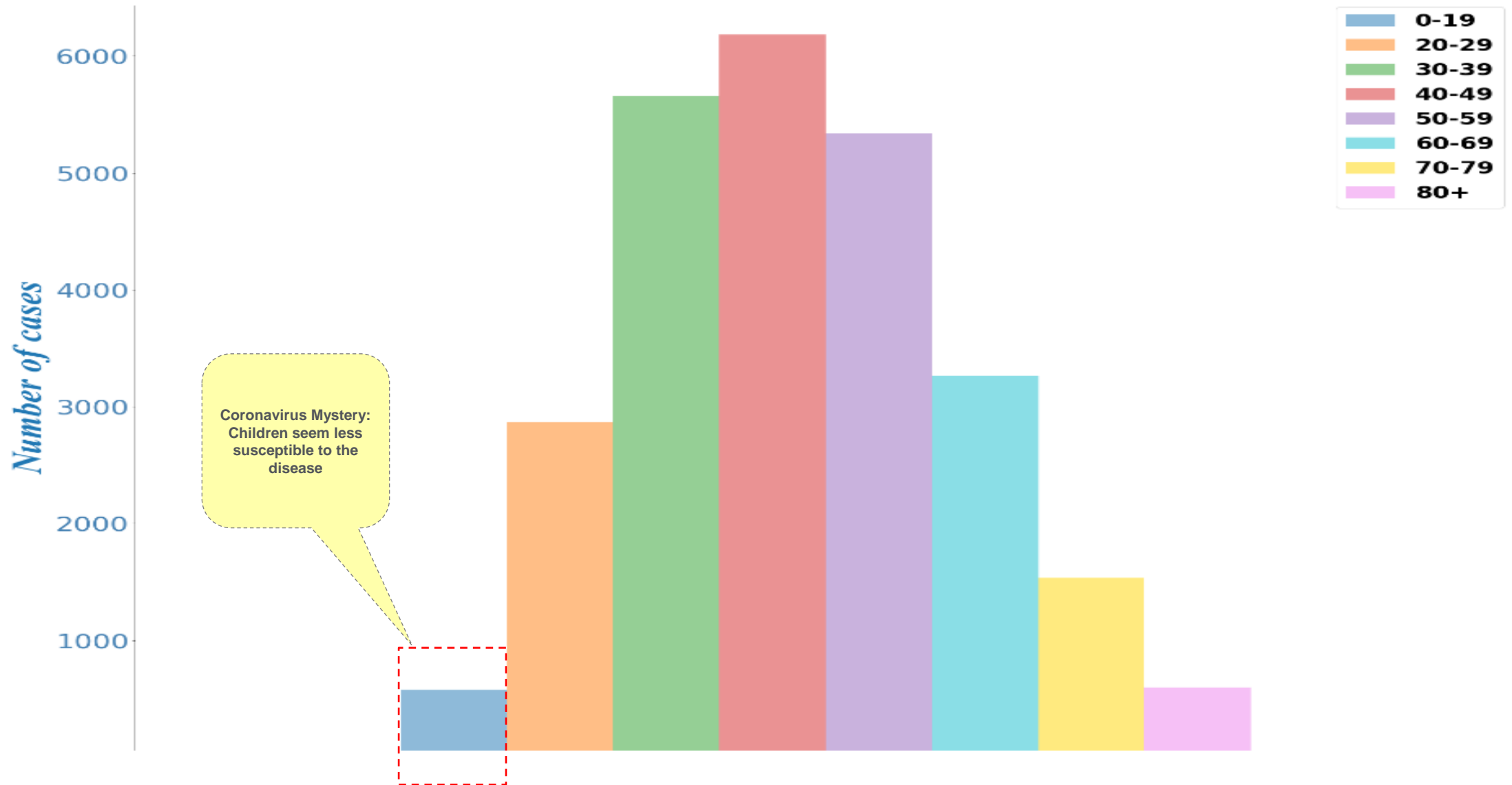
- **Men are more likely to smoke**



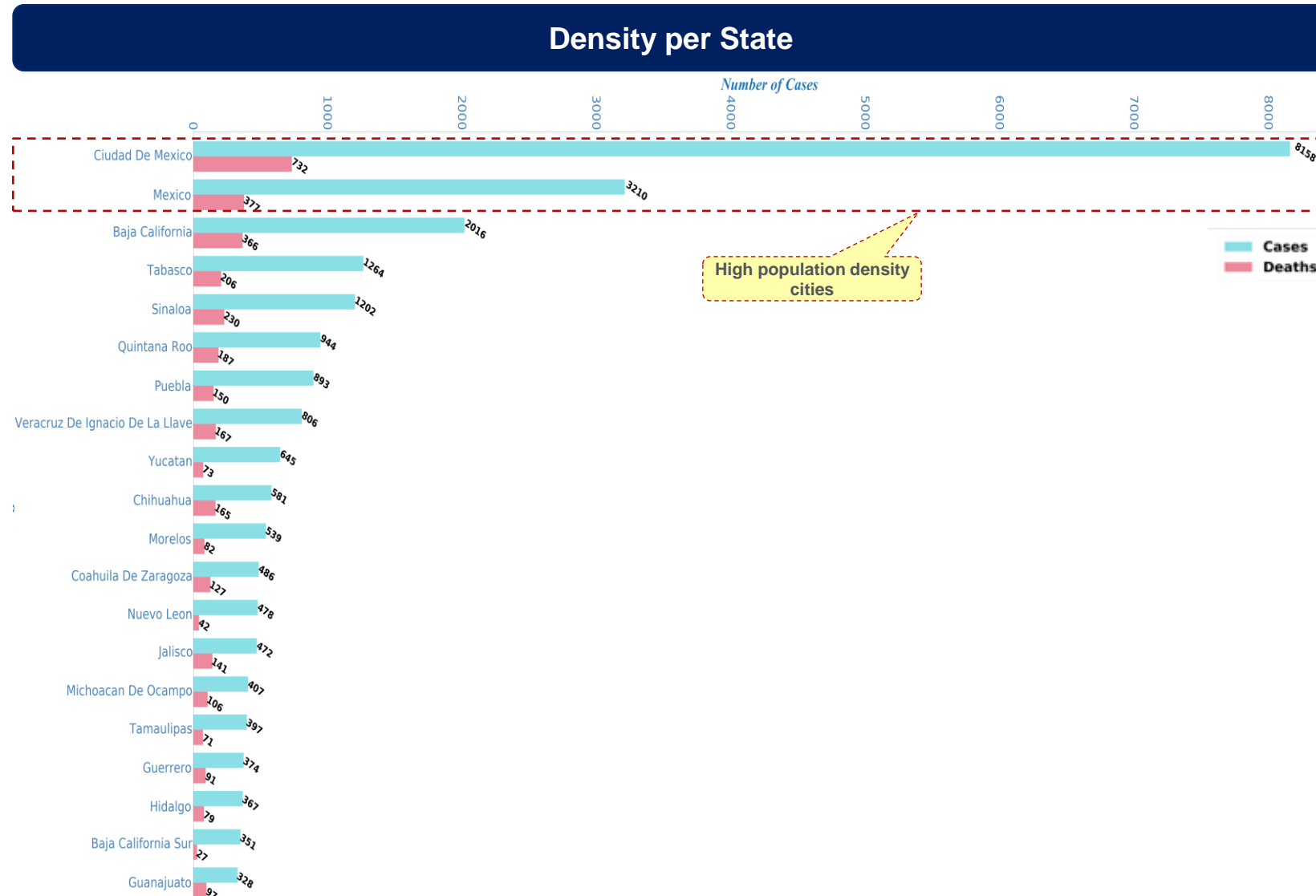
- **A greater percentage of woman wash their hands**

Covid – 19: Is Age a Defining Factor to Getting Infected?

Positive Covid-19 Age Distribution is Very Similar to Overall Population Distribution



Covid – 19: Mild for Some, Deadly for Others (1/3)



Death rate

9%

12%

2%

16%

19%

20%

17%

21%

11%

28%

15%

26%

9%

30%

26%

18%

24%

22%

8%

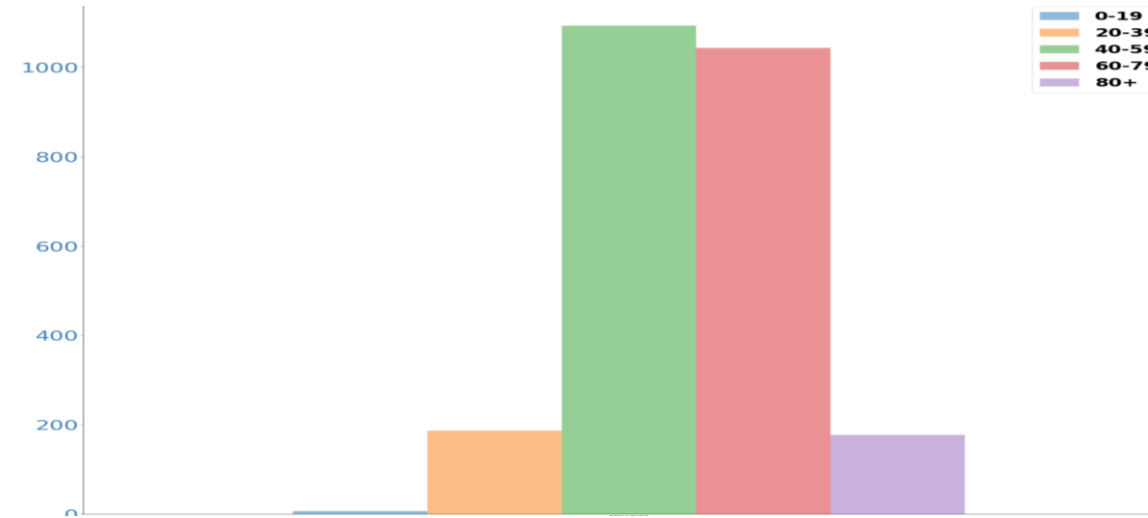
30%

Social distance is key to stop the spread of the disease. More populated cities will have higher rates of infections and people have a higher degree of interaction than in less populated ones

Covid – 19: Mild for Some, Deadly for Others (2/3)

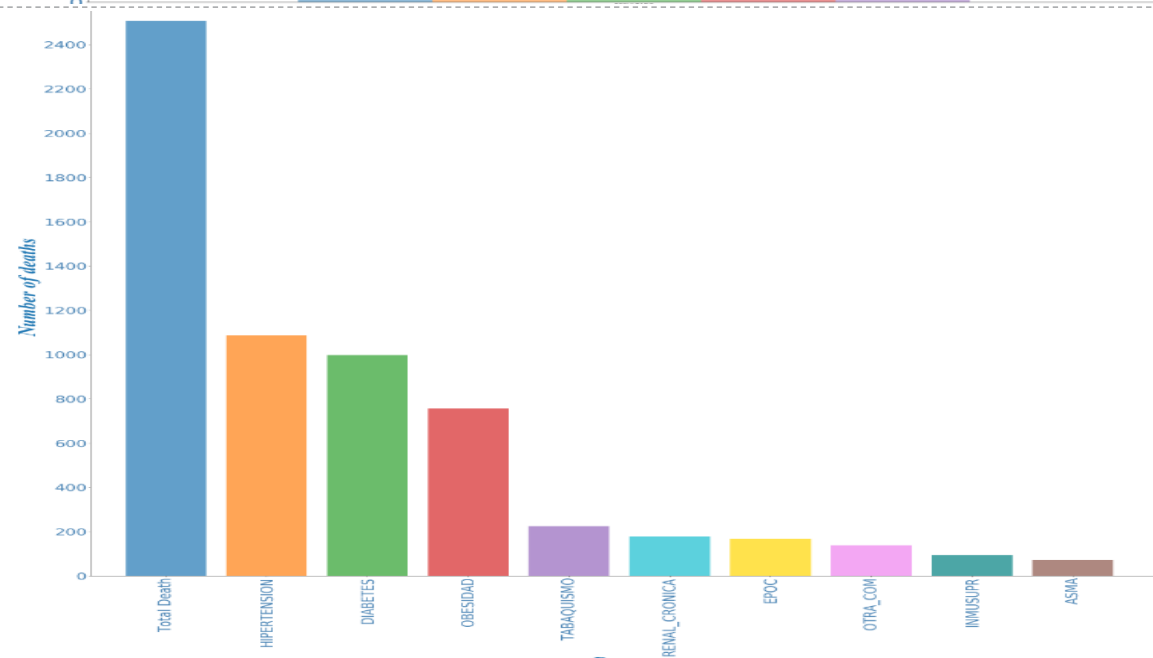
Age & Pre-Existing Conditions

Age



A recent study examined data from individuals who tested positive for COVID-19 in 38 countries and found that **risk of death** from the disease **rose** with each decade of **age**

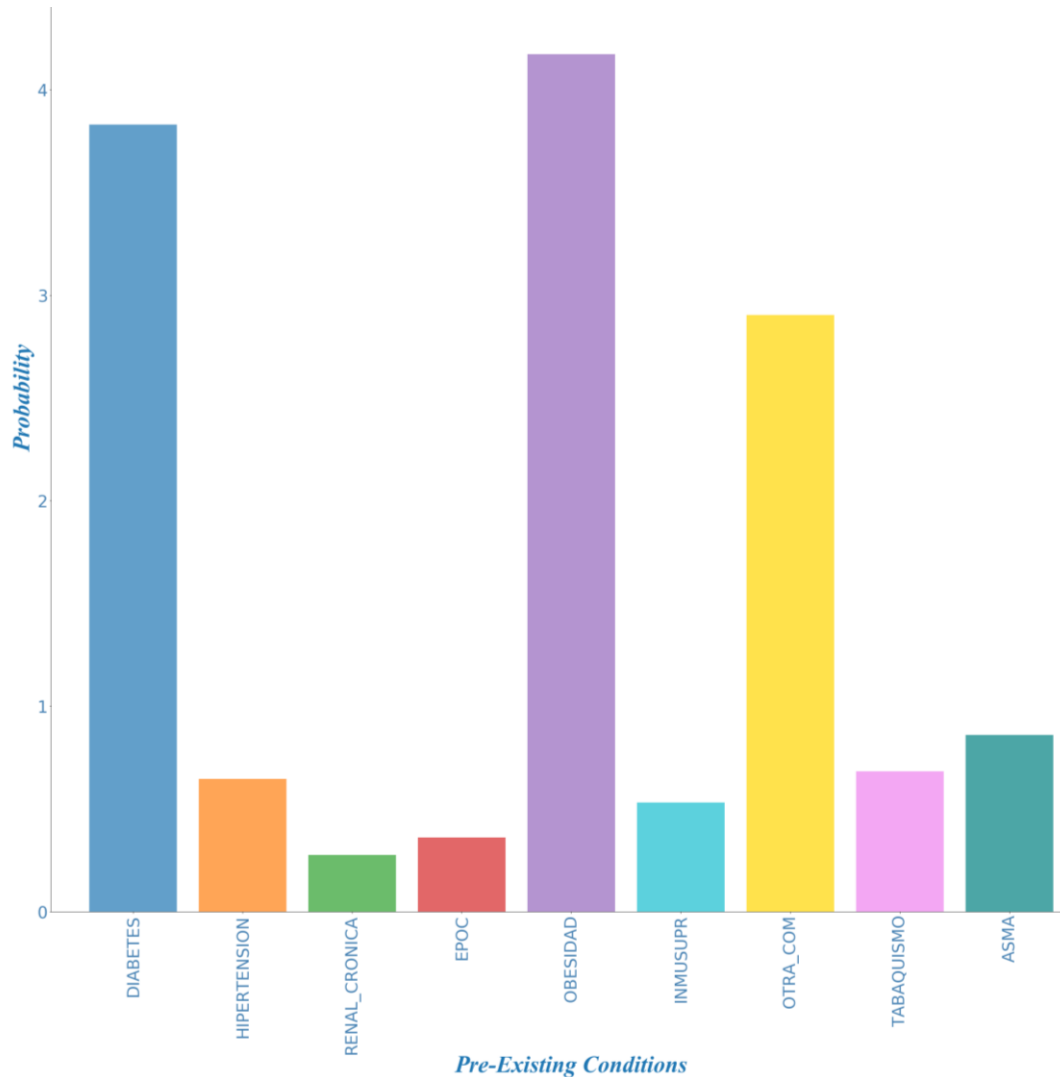
Pre-Existing Conditions



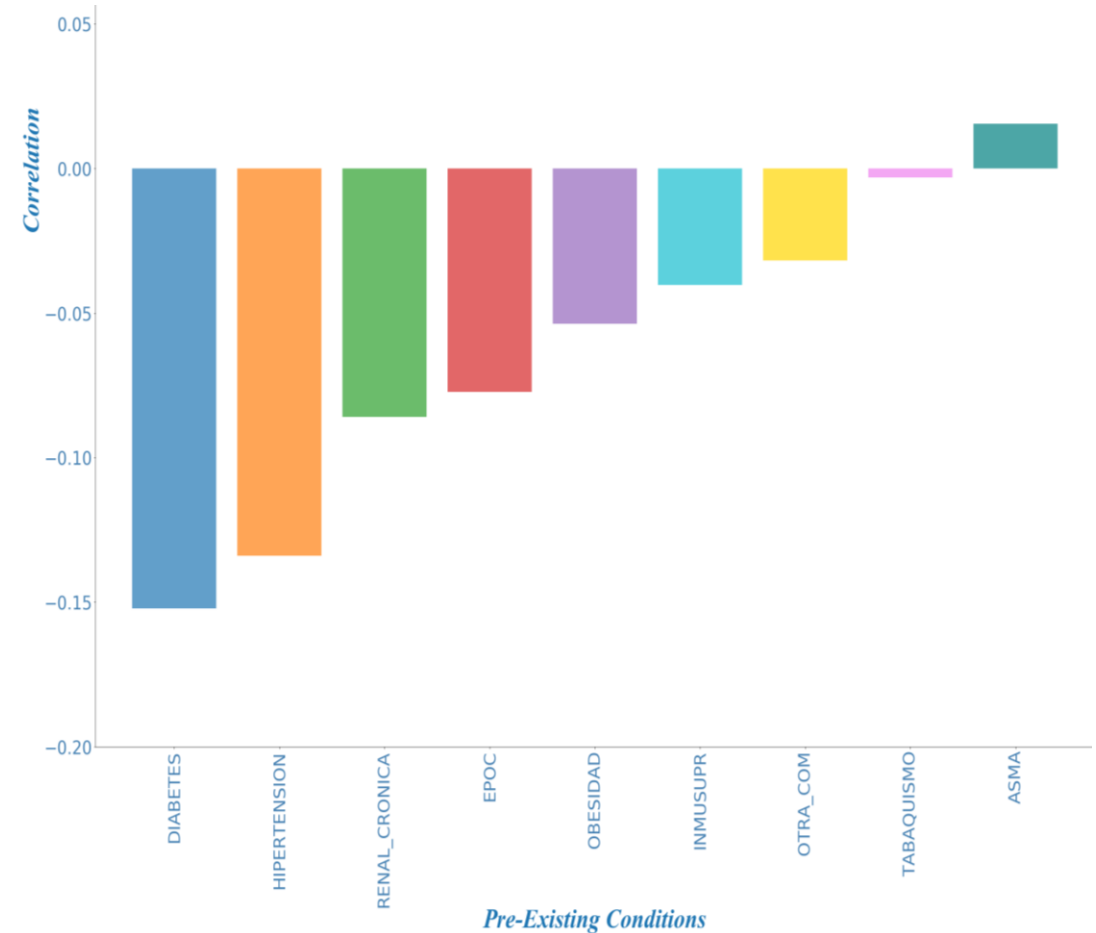
During current global pandemic, physicians **require guidance** for their patient populations in order to adequately **balance the risk of exposure** with the harms of withholding or delaying care

Covid – 19: Mild for Some, Deadly for Others (3/3)

Increase In Death Probability Due to Pre-Existing Conditions

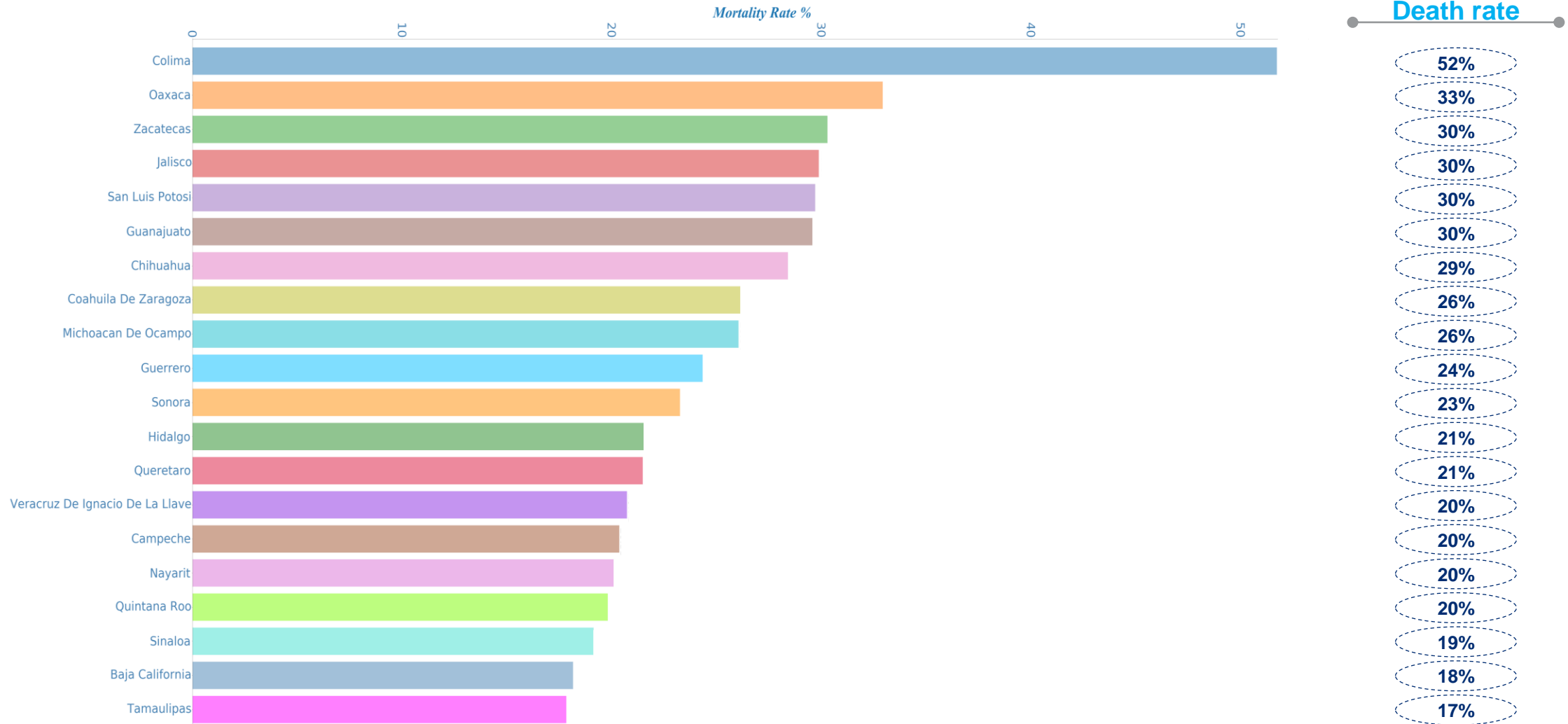


Pre-Existing Conditions Vs Death Correlation



Covid – 19: Deadliest Variable, Health Care Overcapacity

Mortality Rate per State

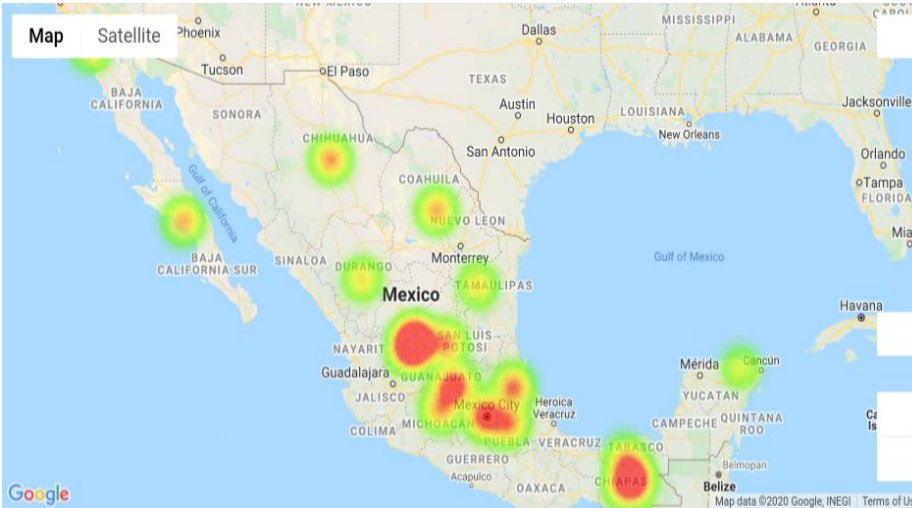


Covid – 19: How Is The Disease Spread Across Mexico

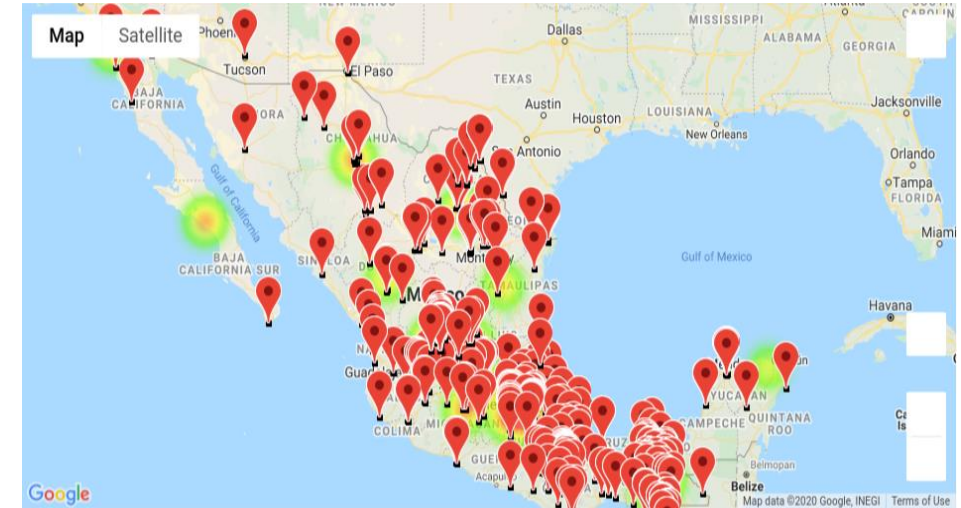
CDMX Has The Highest Number of Infections and Deaths

Demand For Medical Health Care is Surpassing the System Capacity

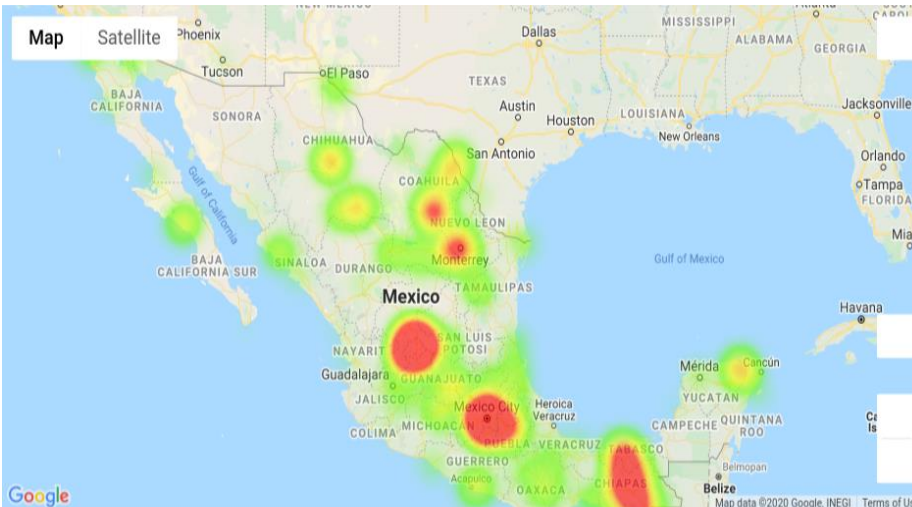
Covid-19
Infections



Hospital Locations



Deaths Due To
Covid-19



Saturation in hospitals serving
patients with coronavirus in
CDMX

El Economista

42 Hospital in Valle has no
availability for patients with
Covid-19

Expansión

Conclusions:

1

Covid-19 is a virus that has a high rate of transmission

2

Younger population tend to have lower rate of infections

3

Age and Respiratory pre-conditions increases the probability of death

4

The health system could reach a point of oversaturation, which could cause an increase in the mortality rate

Thanks!
& Stay At Home