

# Excess Mortality and Covid-19 Vaccinations per Capita

Calculate your risk of excess mortality using the graph below –

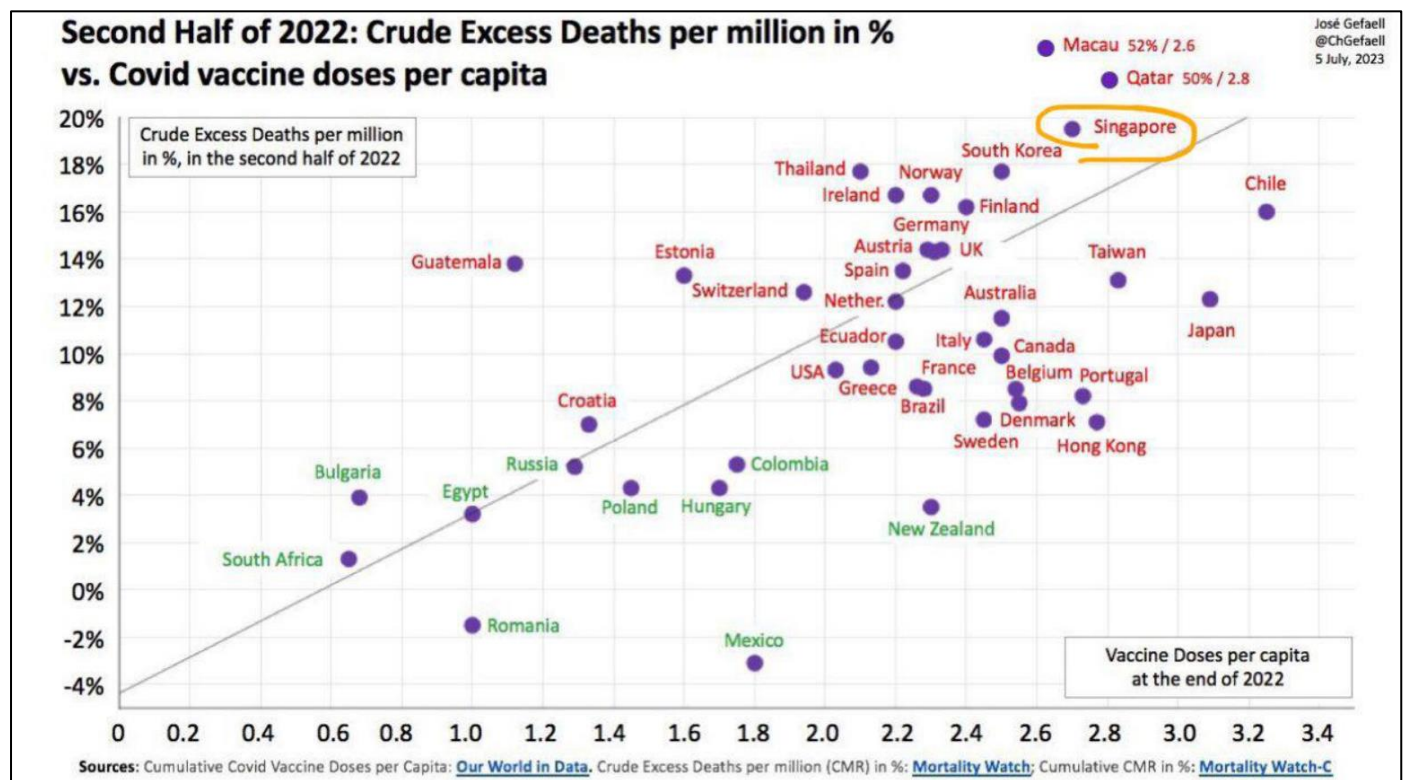
0 jabs	→	Excess mortality = 0%
1 jab	→	Excess mortality = 3%
2 jabs	→	Excess mortality = 10%
3 jabs	→	Excess mortality = 18%
4 jabs	→	Excess mortality = 26%
5 jabs	→	Excess mortality = 32%

Application of **cluster analysis** algorithms (k-means clustering) using machine learning reveals a clustering of countries into two distinct groups. The one dimensional metric used is excess death as a percentage of the total deaths.

The range and averages for these two groups differ widely -

- **Red Group** → **high excess mortality (6 to 20%)**  
Note : (Red outliers Macau 52%, Qatar 50%)
- **Green Group** → **low excess mortality (-4 to 6%)**

Feature analysis shows that number of jabs received per capita is a predictor of which group cluster a country belongs to.



**Linear :** This graph has a linear distribution and so can be used to determine your risk of excess mortality based on the number of jabs you have taken. Note, however, amongst the highest vaccinated countries – Macau and Qatar show an excess mortality of **52%** and **50%** respectively suggesting that at the highest levels of vaccination there may be a rapid increase in excess mortality that deviates from the linear distribution.

## Data Sources :

Cumulative Covid Vaccine Doses Per Capita Source: OUR WORLD IN DATA.

[Coronavirus \(COVID-19\) Vaccinations - Our World in Data](#)

Crude Excess Deaths per Million (CMR) in % Source: MORTALITY WATCH & MORTALITY WATCH-C

[World's Largest Mortality Data Repository! - Mortality Watch](#)