



COVID-19檢驗率、發生率、 死亡率、致死率之國際比較

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目的、統計資料與方法

- 目的：應用大數據分析，探究世界各國**COVID-19**檢驗率與發生率、死亡率、致死率的關係
- 國家數：83 (亞洲:21; 美洲:16; 歐洲:33; 非洲:11; 大洋洲:2)
- 統計資料截自：2020/5/12
- 資料來源：
 - **European Centre for Disease Prevention and Control**
 - **Our World in Data**

Statistics and Research

Coronavirus Pandemic (COVID-19)

by Max Roser, Hannah Ritchie, Esteban Ortiz-Ospina and Joe Hasell

We are grateful to everyone whose editorial review and expert feedback on this work helps us to continuously improve our work on the pandemic. Thank you. [Here](#) you find the acknowledgements.

The data on the coronavirus pandemic is updated daily. Last update: **May 14, 2020** (13:00, London time).

Reuse our work [freely](#) Cite this research

Coronavirus > Deaths Cases Tests Mortality risk Policy responses All charts



You can [download](#) our complete Our World in Data COVID-19 dataset.



European Centre for Disease Prevention and Control

An agency of the European Union

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Coronavirus disease

The disease is rapidly spreading worldwide and the number of cases in Europe is rising with increasing pace in several affected areas.

[Latest information on COVID-19](#)

[Coronavirus disease \(COVID-19\)](#)

[COVID-19: Contact tracing](#)

[COVID-19: Infection prevention in healthcare settings](#)

[COVID-19: Face masks in the community](#)

COVID-19 quick links



各項指標之定義

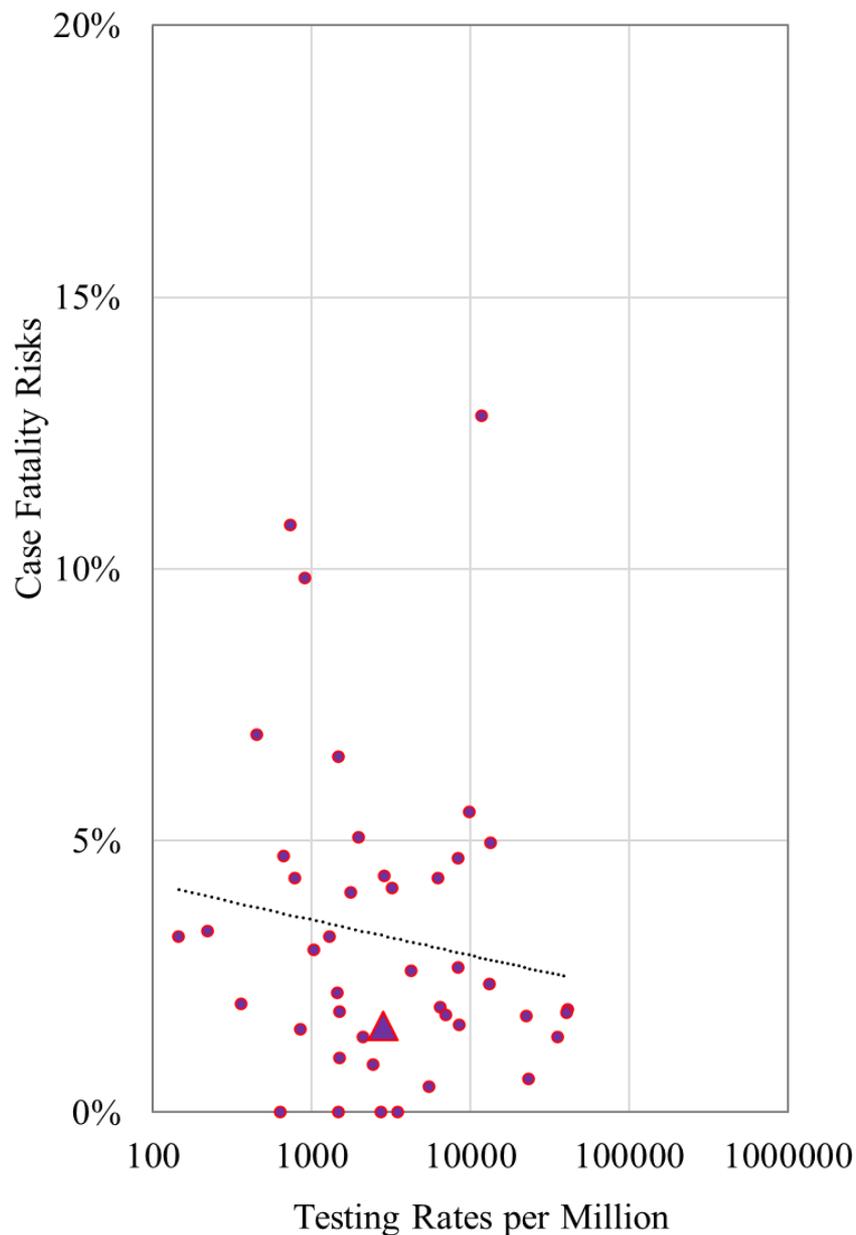
- **Testing rate (檢驗率):**
$$\frac{\text{COVID-19總檢驗數}}{\text{總人口數}}$$
- **Incidence rate (發生率):**
$$\frac{\text{COVID-19檢驗陽性確診數}}{\text{總人口數}}$$
- **Mortality rate (死亡率):**
$$\frac{\text{COVID-19死亡數}}{\text{總人口數}}$$
- **Case fatality risk (致死率):**
$$\frac{\text{COVID-19死亡數}}{\text{COVID-19檢驗陽性確診數}}$$

指標間的關係

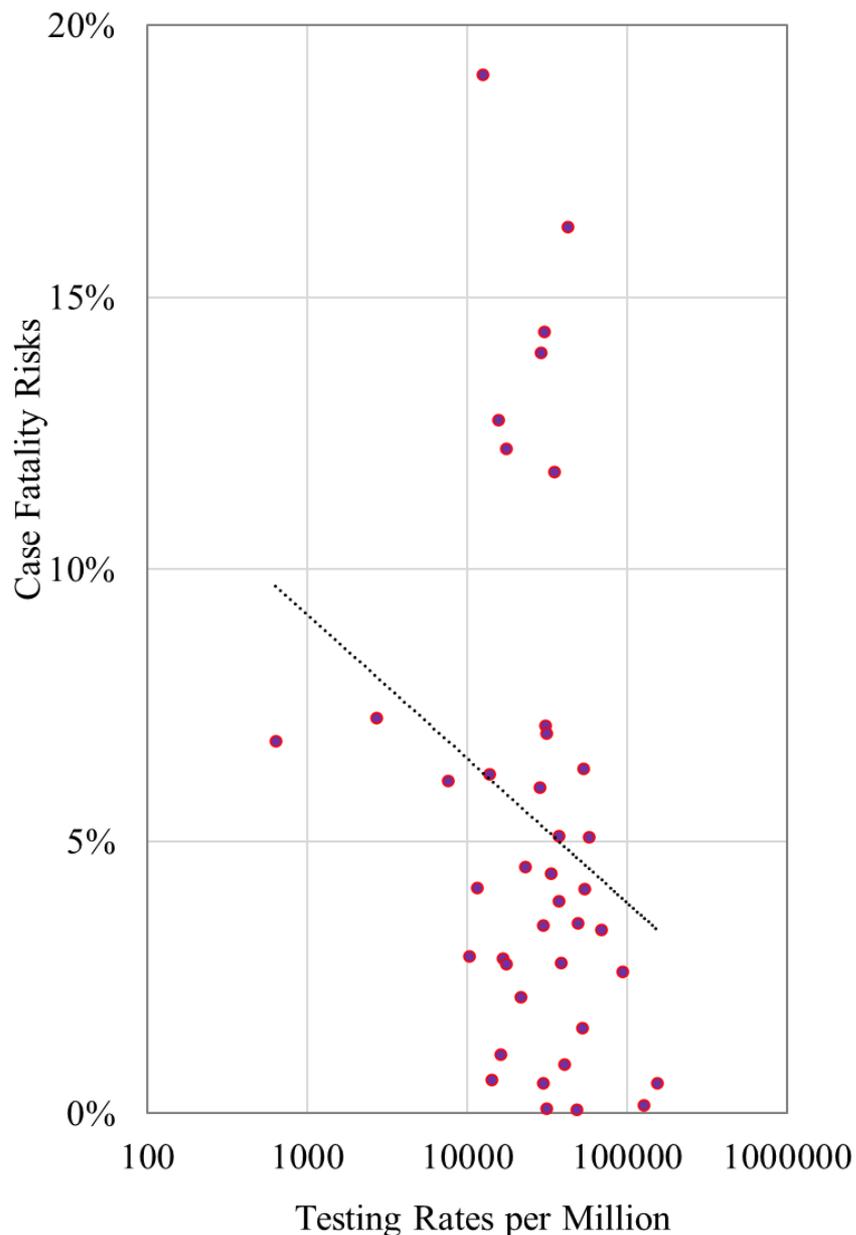
- Case fatality risk (致死率) = $\frac{\text{死亡率}}{\text{發生率}}$

- Positivity rate (陽性率) = $\frac{\text{發生率}}{\text{檢驗率}}$

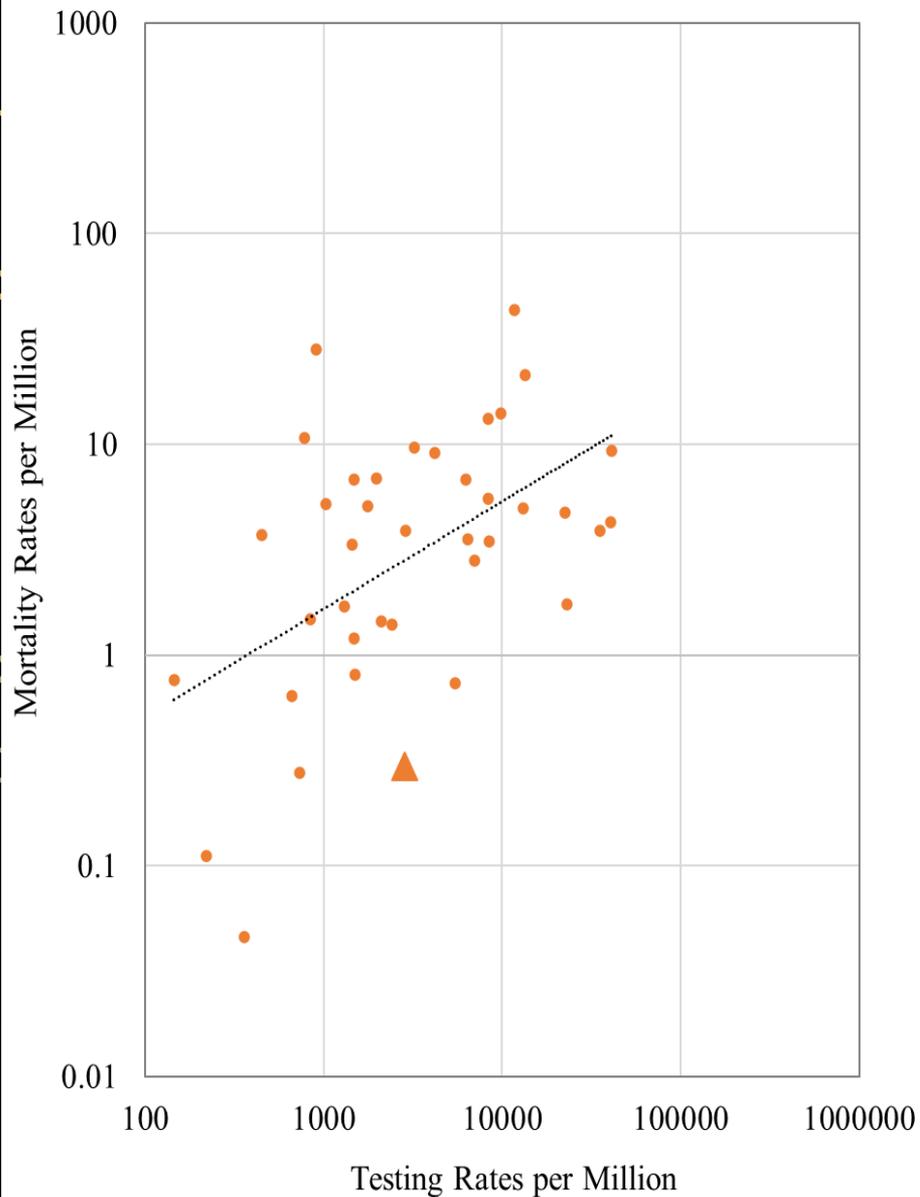
COVID-19低發生率國家 (43國) (小於每百萬人口500個案)



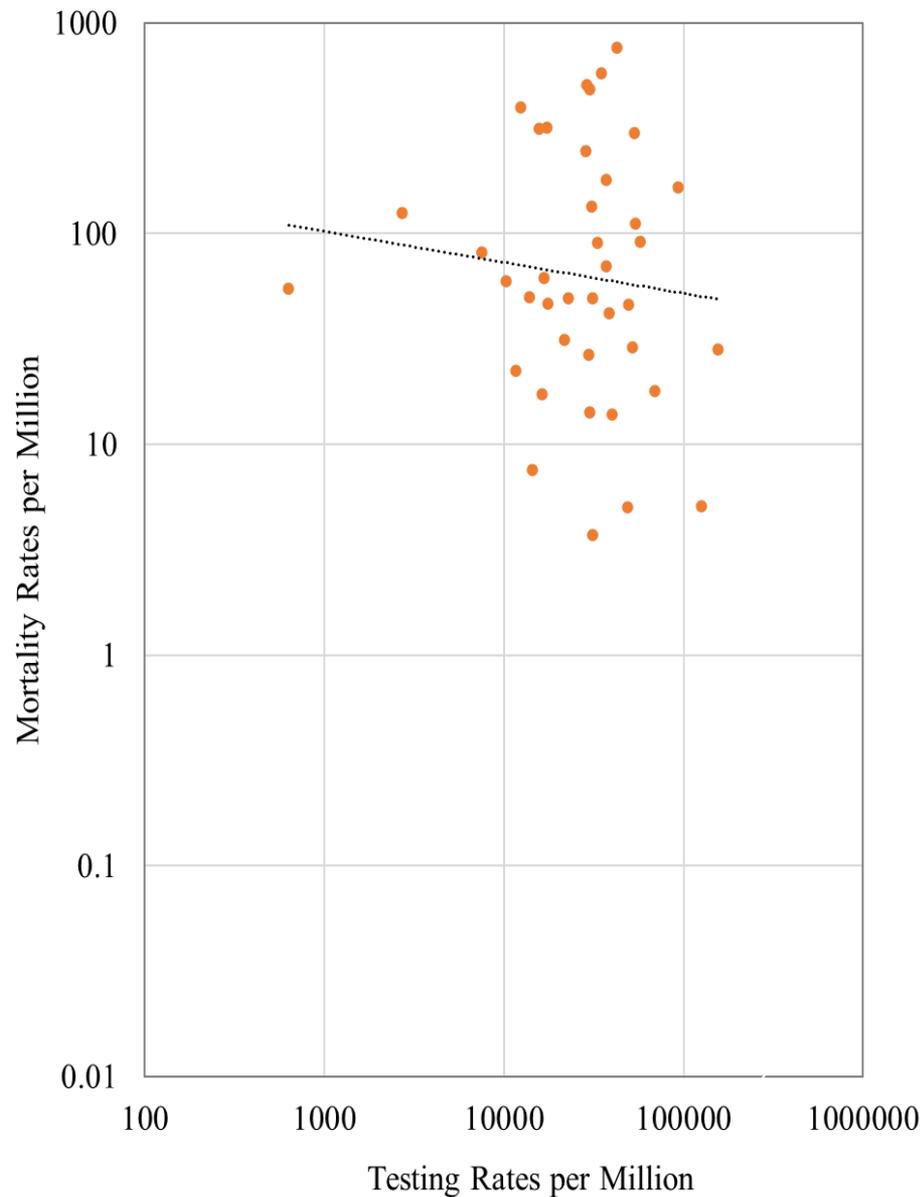
COVID-19高發生率國家 (50國) (大於每百萬人口500個案)



COVID-19低發生率國家 (43國) (小於每百萬人口500個案)



COVID-19高發生率國家 (50國) (大於每百萬人口500個案)



重點整理

- 檢驗率較高的國家，**COVID-19**致死率較低
- 高發生率國家執行大規模檢驗有助於控制**COVID-19**發生率，並降低死亡率
- 低發生率國家執行大規模檢驗，無證據顯示能有效控制**COVID-19**疫情
- 臺灣的**COVID-19**致死率、發生率、死亡率均在低發生率國家的平均值以下