



# COVID-19 Update

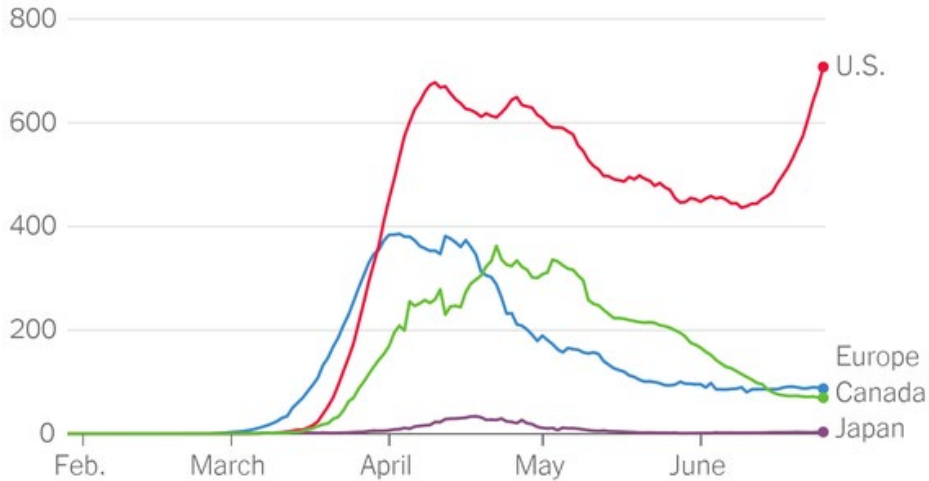
Dr Mark Cunningham-Hill  
Medical Director NEBGH



Monday June 29<sup>th</sup>

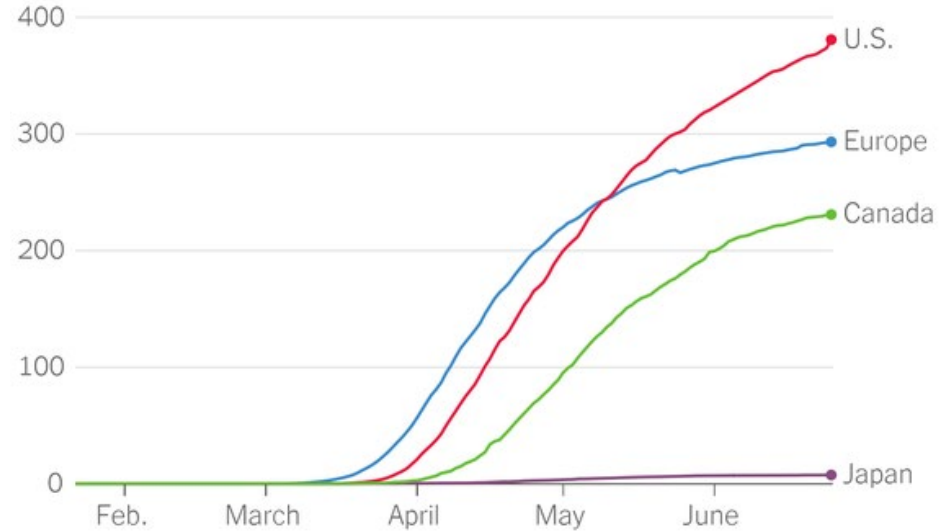
# Two Graphs

New confirmed cases per million residents, previous seven days



Europe includes all countries fully in Europe, regardless of E.U. status.

Total Covid-19 deaths per million residents

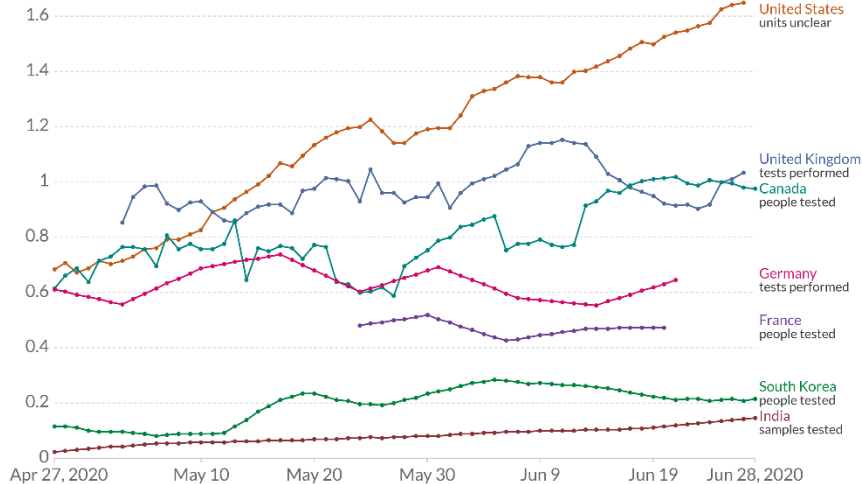


Europe includes all countries fully in Europe, regardless of E.U. status.

# Is it Testing?

## Daily new COVID-19 tests per 1,000 people

Shown is the rolling 7-day average.



Source: Official data collated by Our World in Data

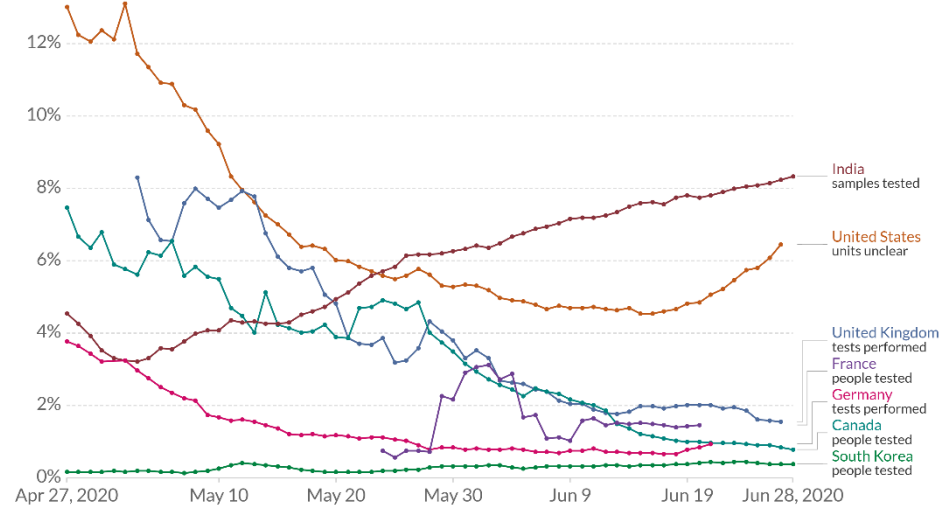
Note: For testing figures, there are substantial differences across countries in terms of the units, whether or not all labs are included, the extent to which negative and pending tests are included and other aspects. Details for each country can be found on [ourworldindata.org/covid-testing](https://ourworldindata.org/covid-testing).

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## The share of daily COVID-19 tests that are positive

Shown is the rolling 7-day average. The number of confirmed cases divided by the number of tests, expressed as a percentage. Tests may refer to the number of tests performed or the number of people tested – depending on which is reported by the particular country.



Source: Official data collated by Our World in Data - Data last updated 29th Jun, 06:12 (GMT-04:00)

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# Factors Influencing The US

- State by state approach
- Politicians and the media driving
  - Misinformation
  - Inconsistent messaging
- Date versus data driven response
- People and culture

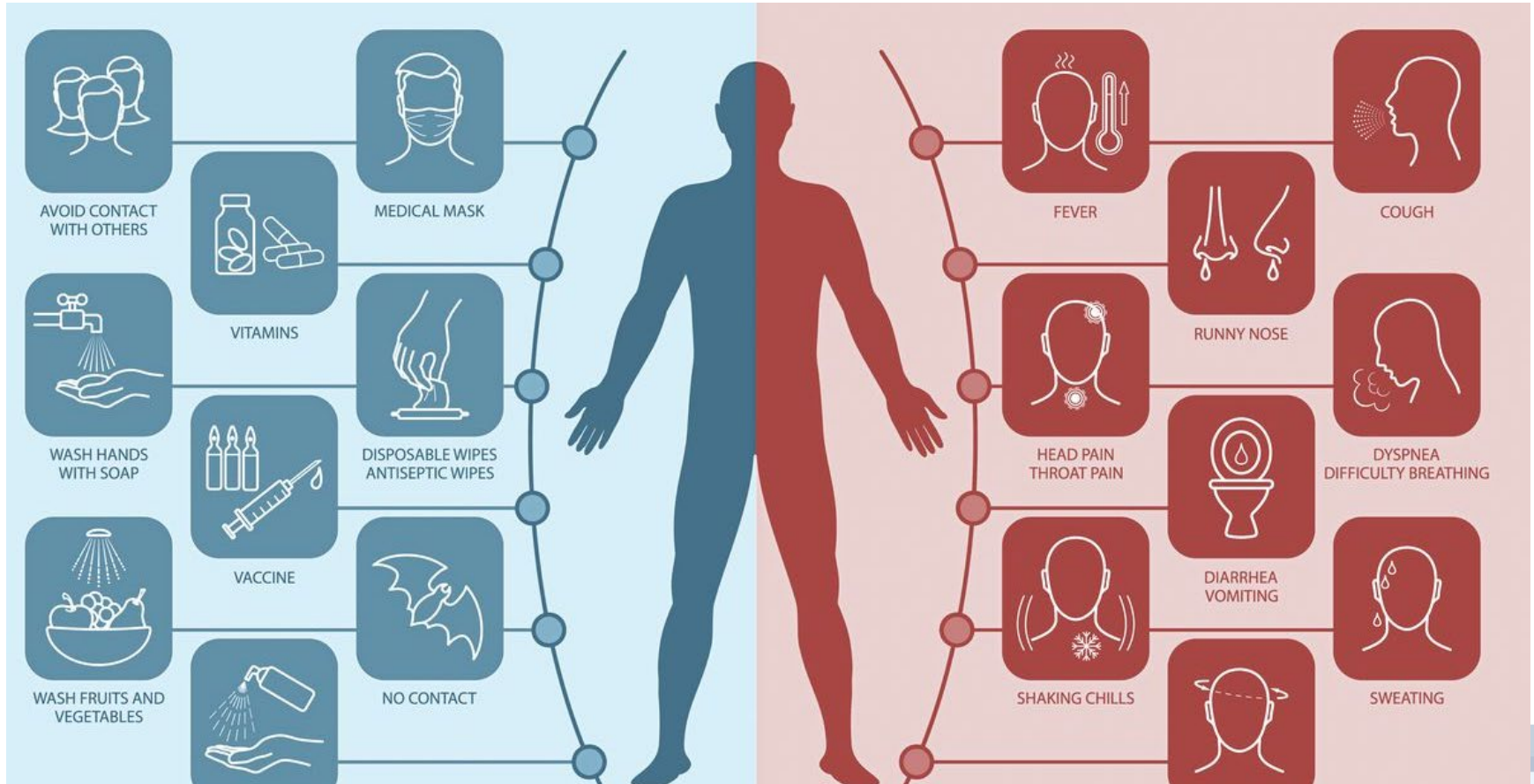


Iowa, Montana, Wisconsin, South Dakota — have no mask requirements at all





# Symptoms





# Symptoms of COVID-19

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- **Fatigue**
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- **Congestion or runny nose**
- **Nausea or vomiting**
- **Diarrhea**

Symptoms may appear **2-14 days after exposure to the virus**

35+% of people may be **asymptomatic**



# Prevalence of Symptoms

- 88% of patients develop a fever
- 68% of patients develop a dry cough
- 40-53% get loss of smell +/- taste
- 38-70% of patients develop fatigue
- 20% of patients develop shortness of breath
- 23% of patients experienced wheezing
- 15-35% develop muscle pain
- 14% get a sore throat or headache





# Additional Symptoms

- Neurological symptoms ~25% experience:
  - Dizziness, headache, confusion or delirium, seizure, and impaired balance or coordination.
  - Among those symptoms, dizziness was the most common, affecting nearly 17% of patients

# Serious symptoms

- Bluish skin or lips due to lack of oxygen in the blood
- Shortness of breath
- Persistent pain or pressure in the chest
- New confusion
- Inability to wake or stay awake





# Clotting & COVID-19

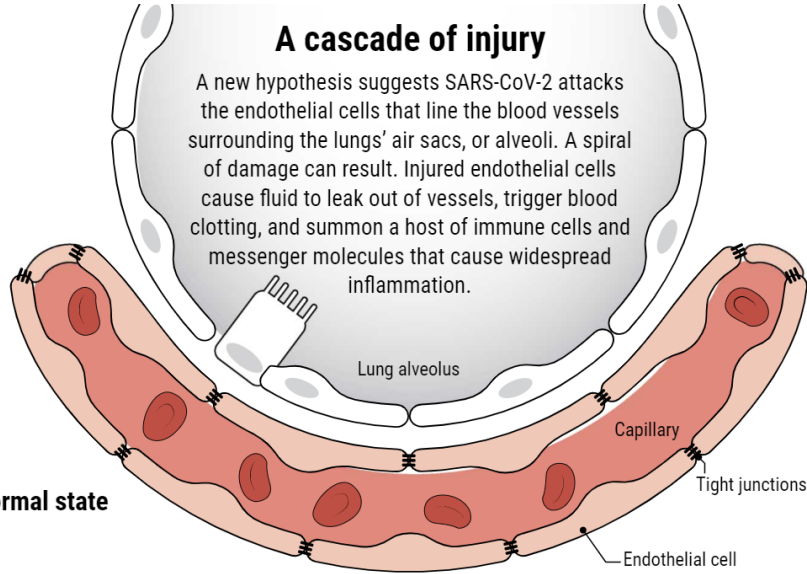
- It's possible that the virus attacks blood vessels directly, or
- A strong inflammatory response that damages blood vessels, or
- Low oxygen levels may also damage blood vessels

# Potential Mechanism

## A cascade of injury

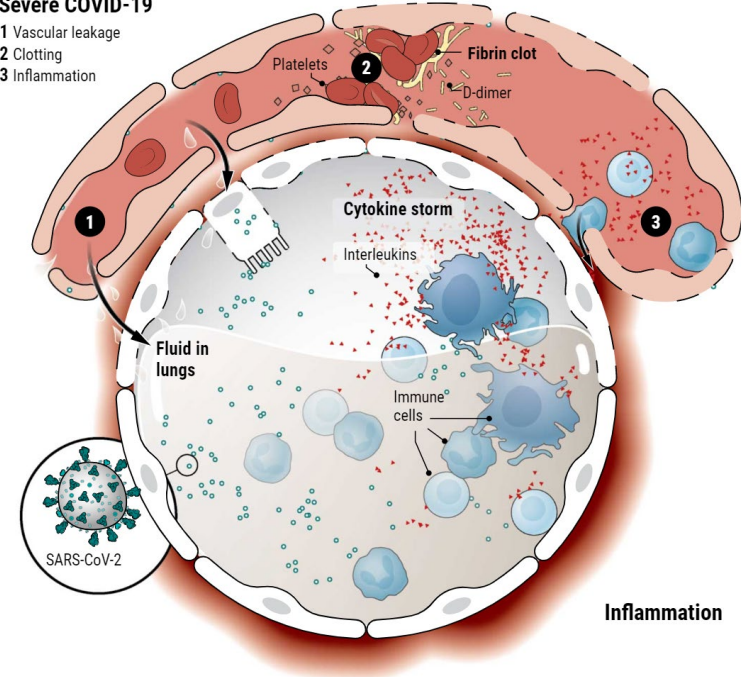
A new hypothesis suggests SARS-CoV-2 attacks the endothelial cells that line the blood vessels surrounding the lungs' air sacs, or alveoli. A spiral of damage can result. Injured endothelial cells cause fluid to leak out of vessels, trigger blood clotting, and summon a host of immune cells and messenger molecules that cause widespread inflammation.

Normal state



## Severe COVID-19

- 1 Vascular leakage
- 2 Clotting
- 3 Inflammation



# Strokes

- Tended to be younger, average age of 63 years vs. 70 years for non-COVID stroke patients;
- Had more severe strokes
- Had more clotting
- Were more likely to have a cryptogenic stroke
- Were more likely to be dead at hospital discharge, 63.6% vs. 9.3%.



# Coagulation Complications

- Kidney damage
- Multiple organ dysfunction syndrome (MODS)
- Heart, Liver, intestines - ? Placenta
- Peripheral limb clots – amputation
- COVID-toe





# Face Shields Vs. Masks





# Questions