

# Global Health Cast 12

Thanks for joining!



Dr. Melvin Sanicas



Prof. Dr. Joe Schmitt

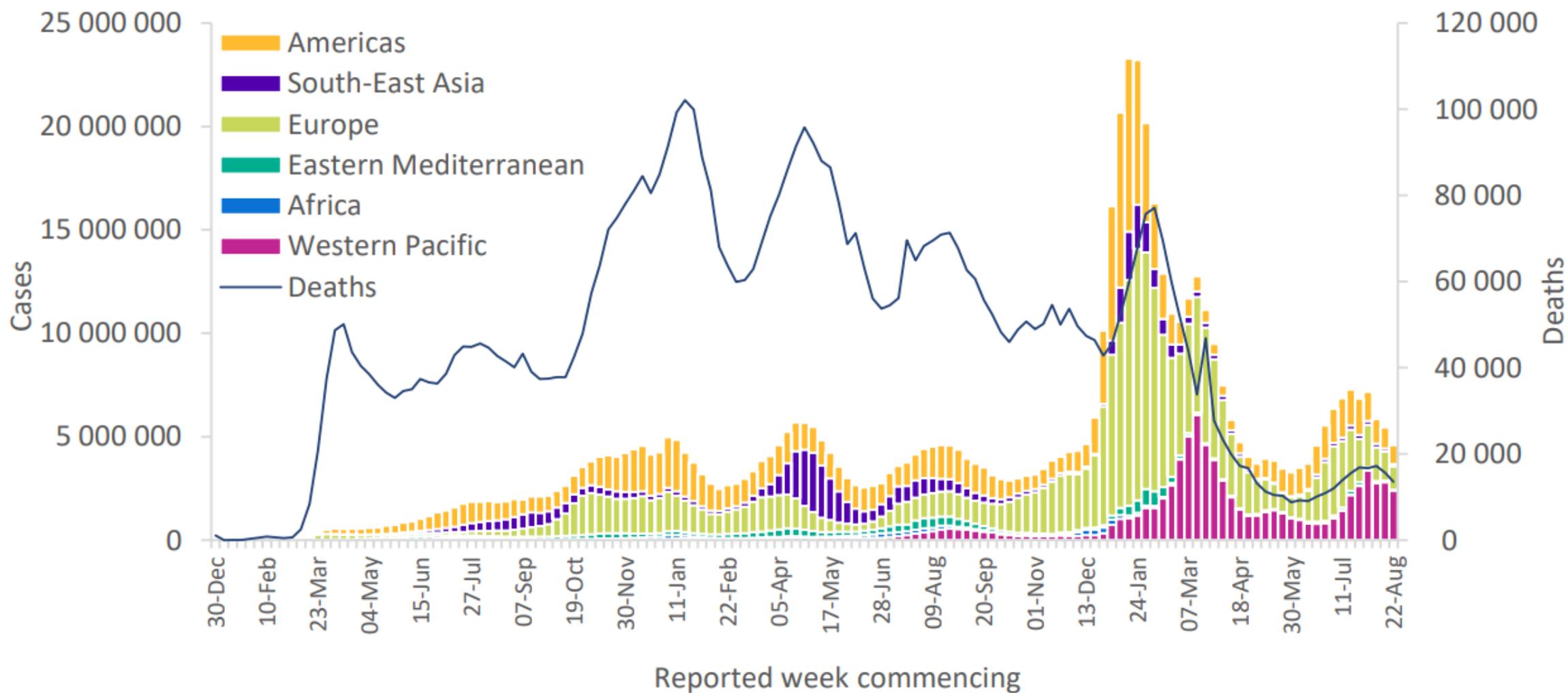
**Every Tuesday**

12.00 noon - CET

# What we talk about today

- ▶ COVID-19 update
- ▶ Monkeypox update
- ▶ The “antigenic sin”
- ▶ Why vaccines may fail
- ▶ Natural course of COVID19
- ▶ Rate of “hybrid” protection against COVID BA.5
- ▶ Tools to fight COVID: optimal timing
- ▶ Fighting COVID with NPIs: masks and surface coating

**Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 28 August 2022\*\***



# Monkeypox: Daily confirmed cases

7-day rolling average

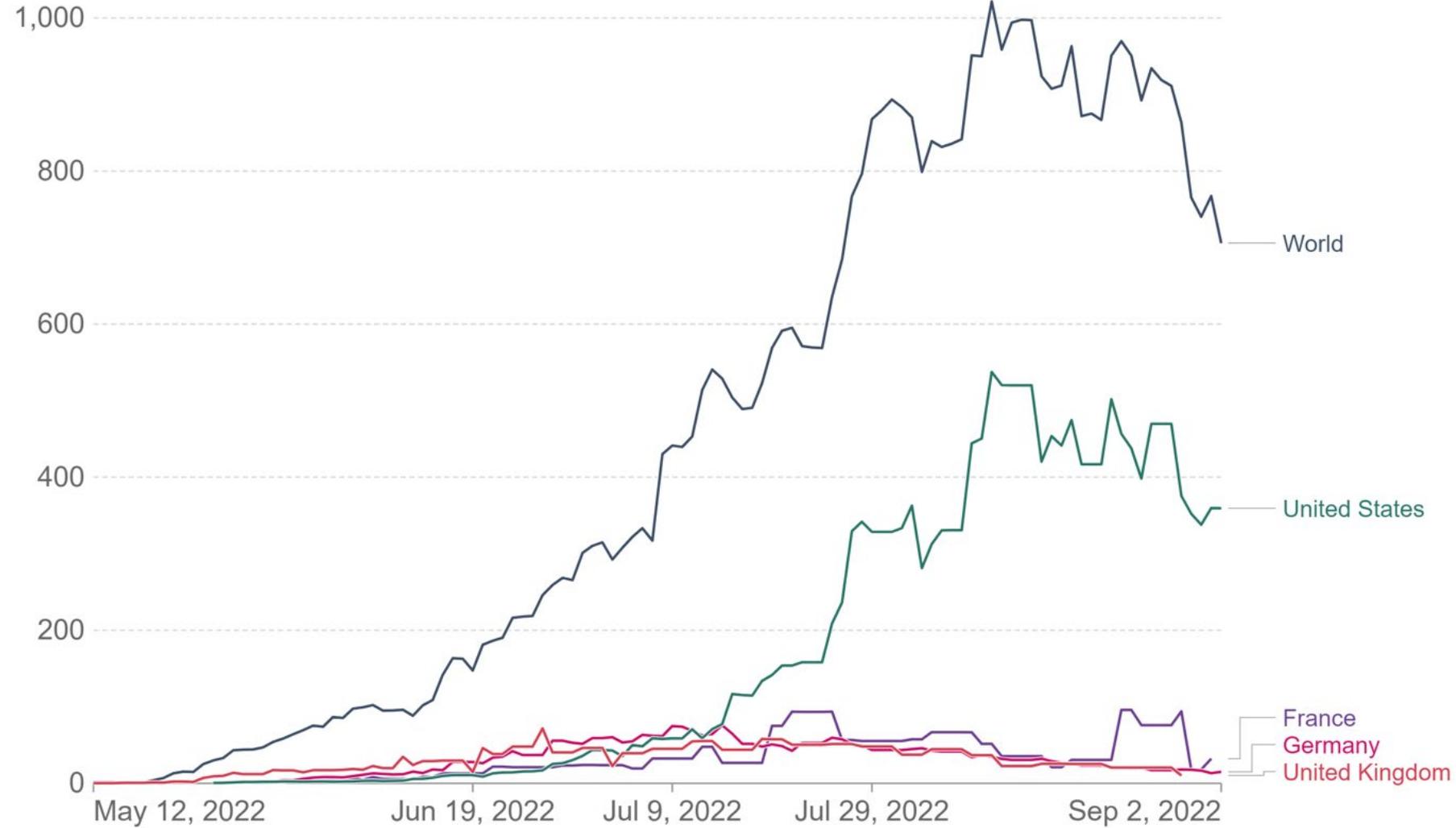


Source: Data produced by the 'Global.health' team — available at [github.com/globaldothealth/monkeypox](https://github.com/globaldothealth/monkeypox)

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# Monkeypox: Daily confirmed cases

7-day rolling average

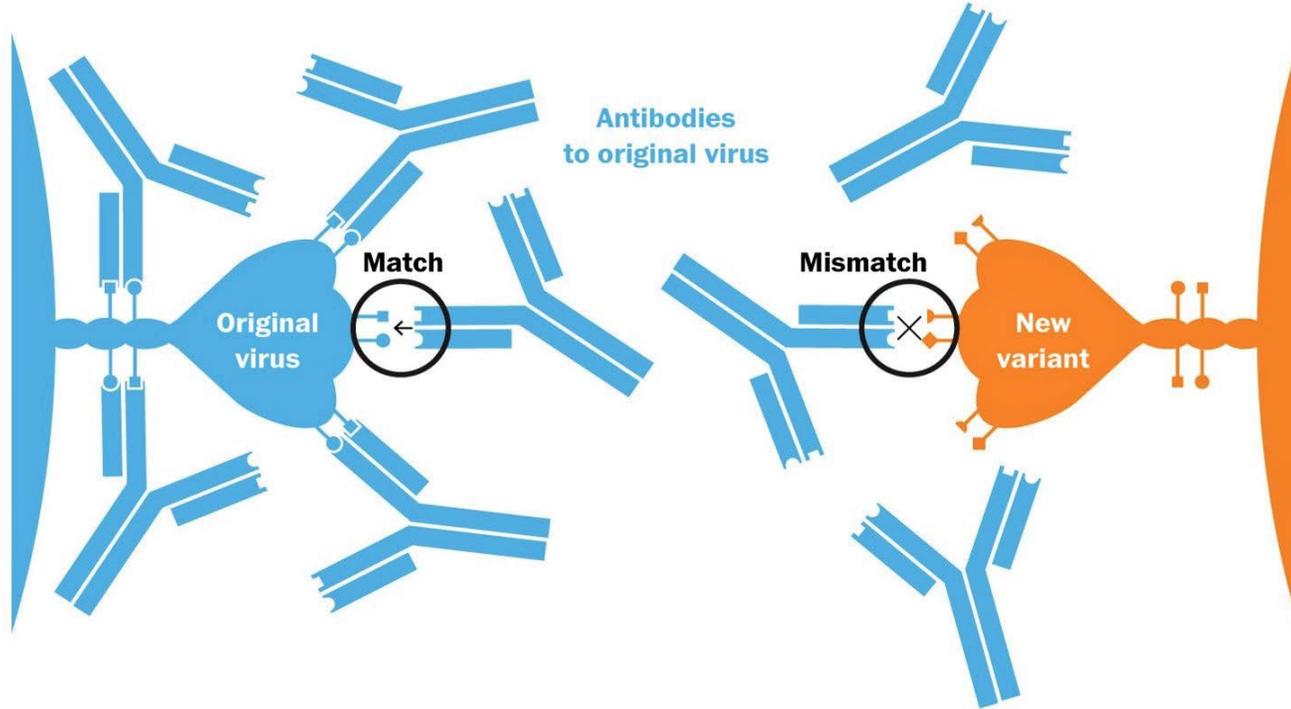


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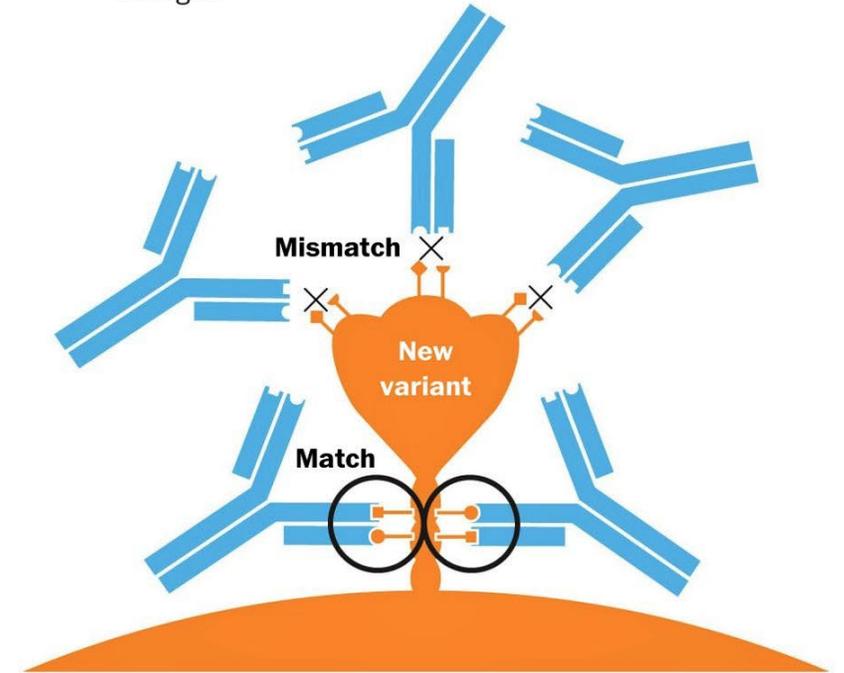
# „Antigenic original sin“

Antibodies match and latch on to the original virus.



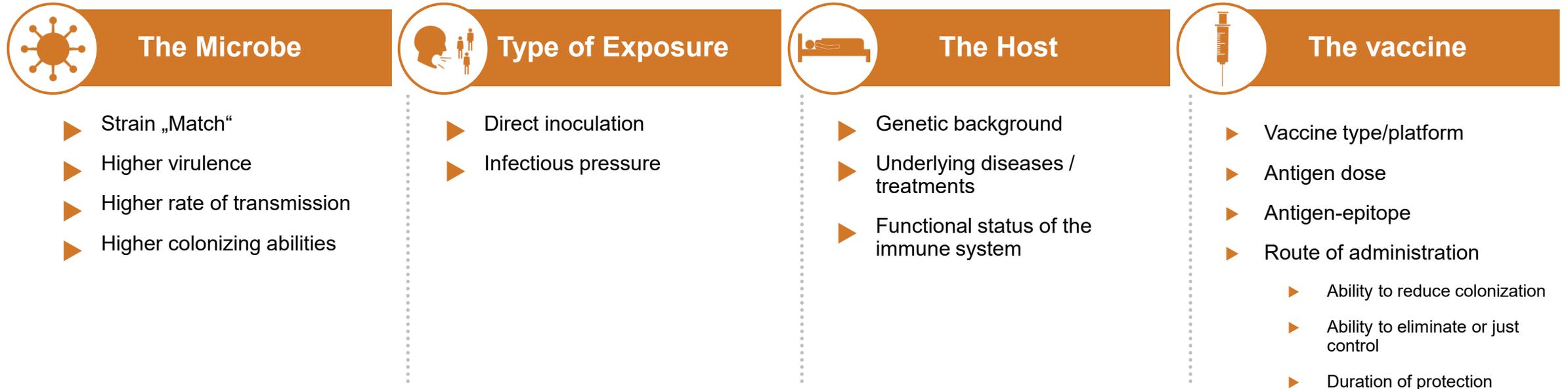
But the older antibodies are not a good match for newer variants.

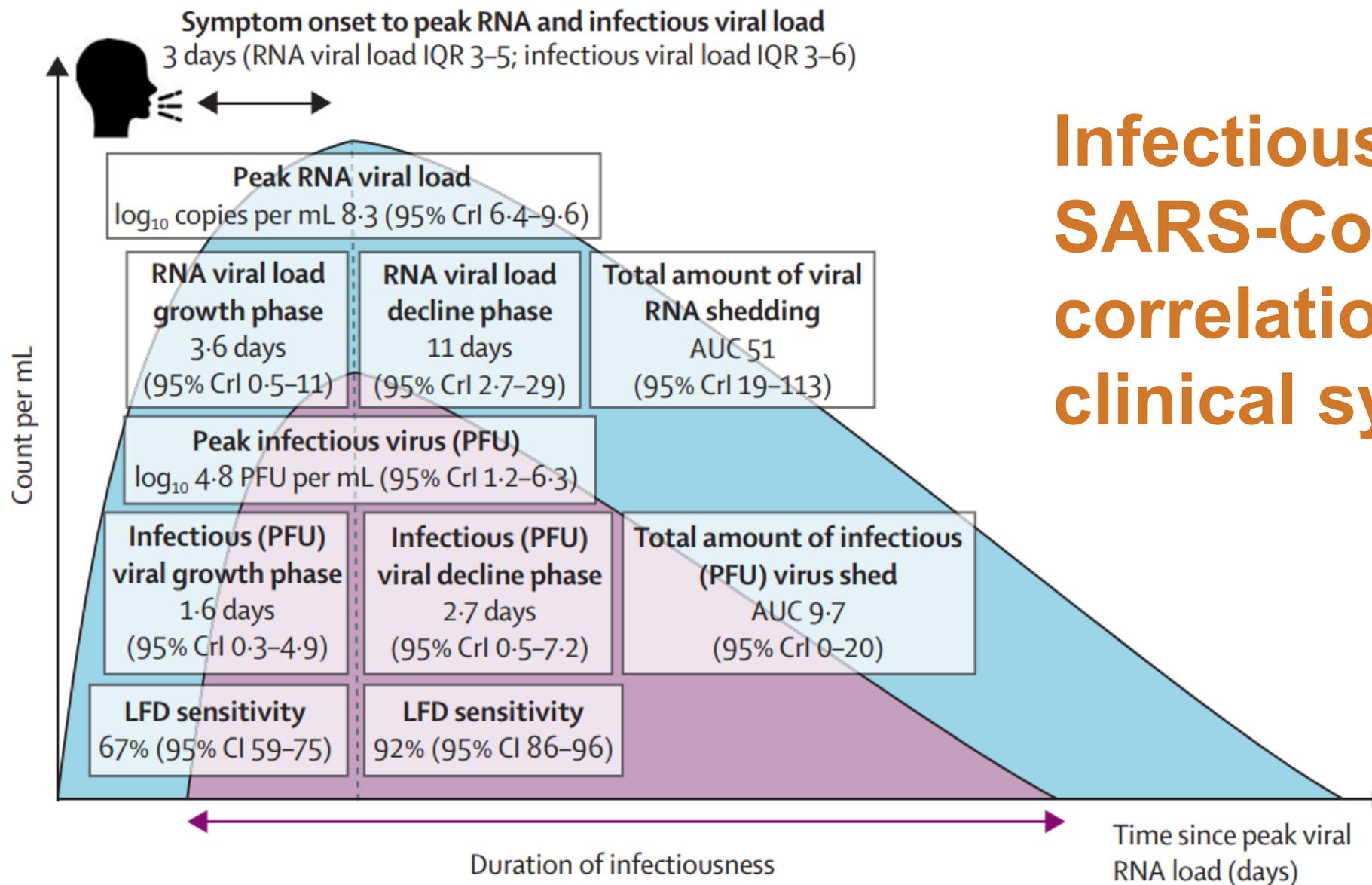
Antibodies to the original virus may still be able to attach to some parts of a newer variant that have not changed.



# Why vaccines may fail

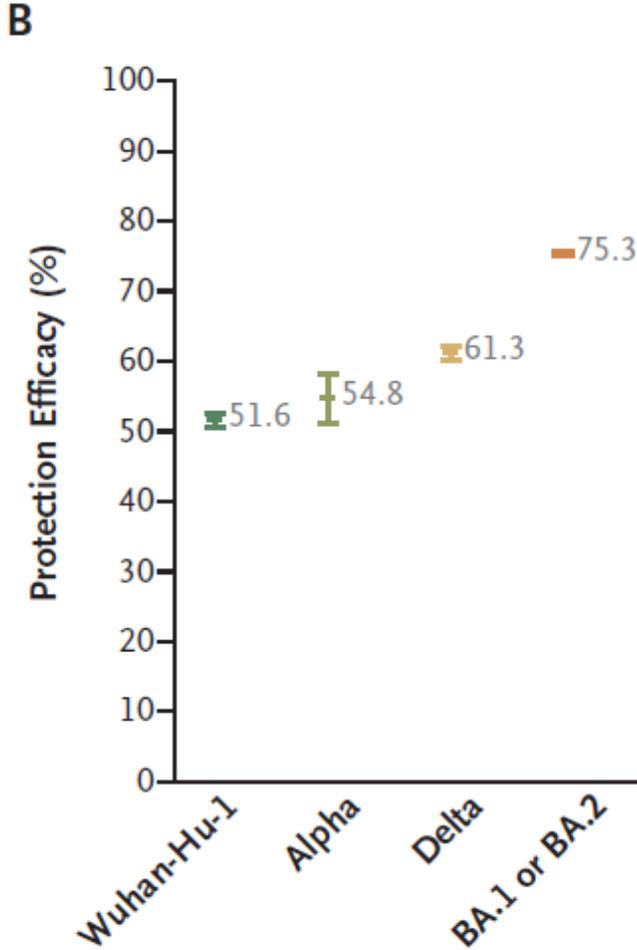
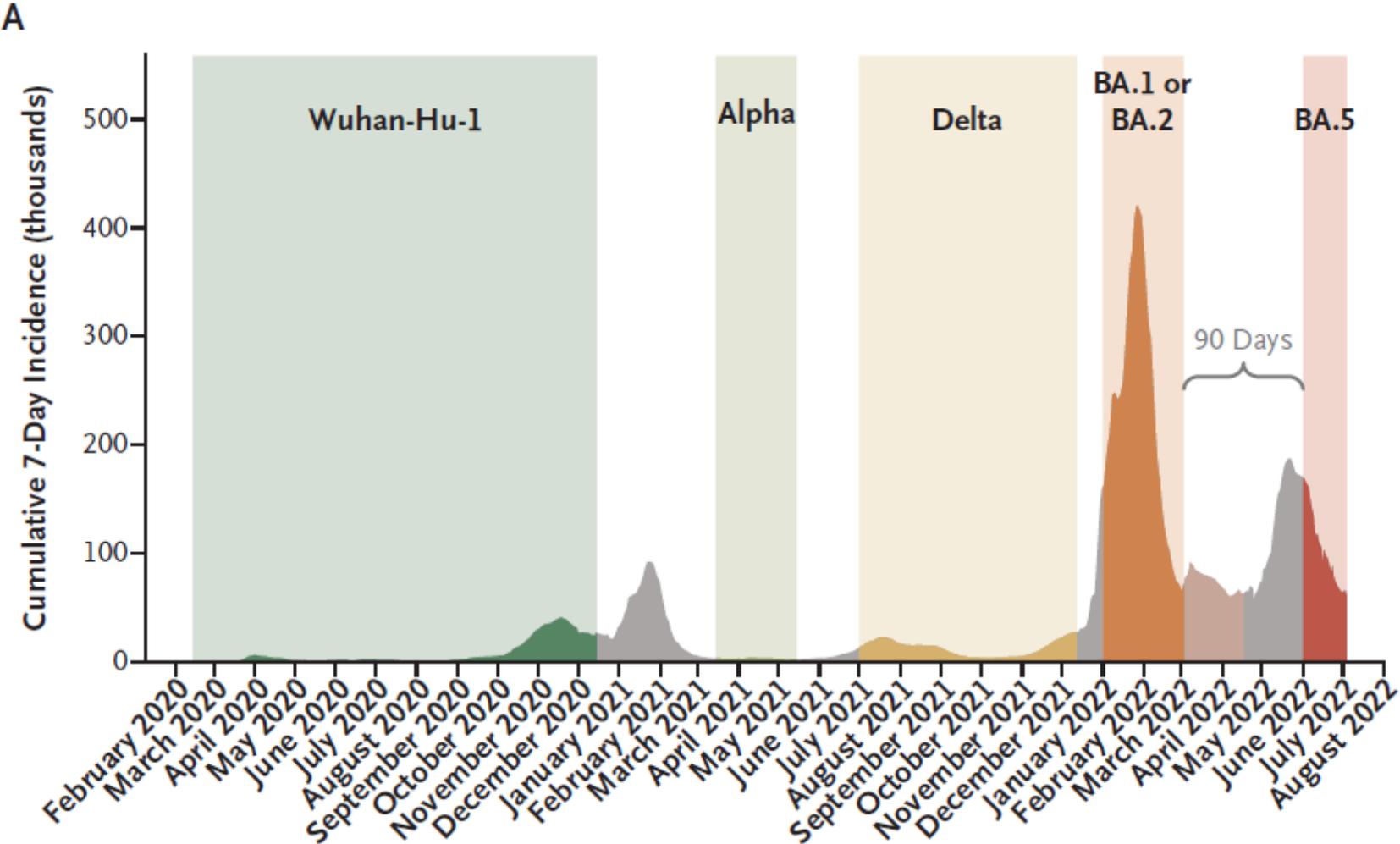
To date, no COVID19 vaccine can eliminate SARS-CoV2.  
The goal is to control the disease using repeated boosters.



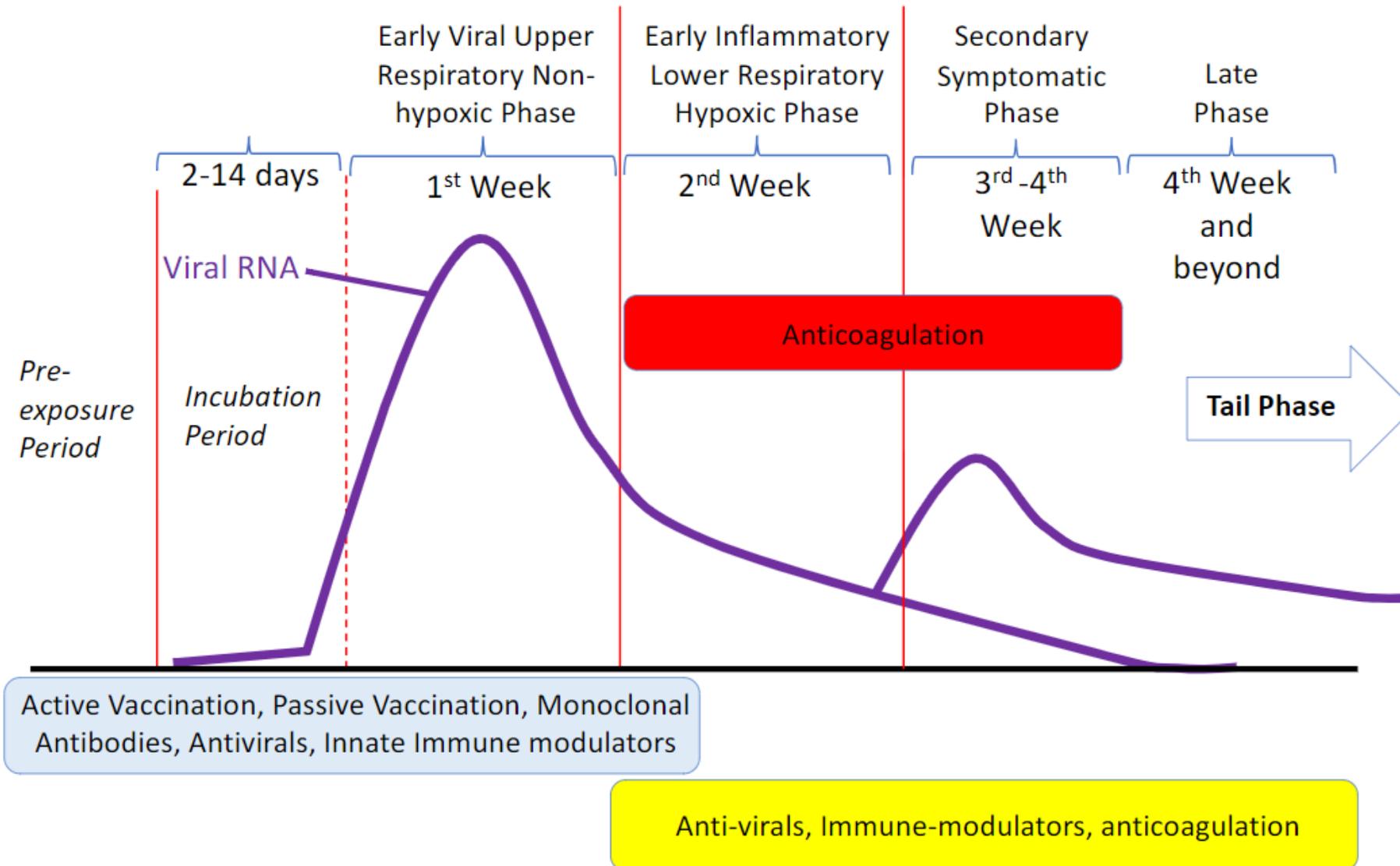


# Infectiousness of SARS-CoV2: correlation with clinical symptoms

# Portugal: Protection against BA.5 provided by vaccination followed by SARS-CoV2-infection

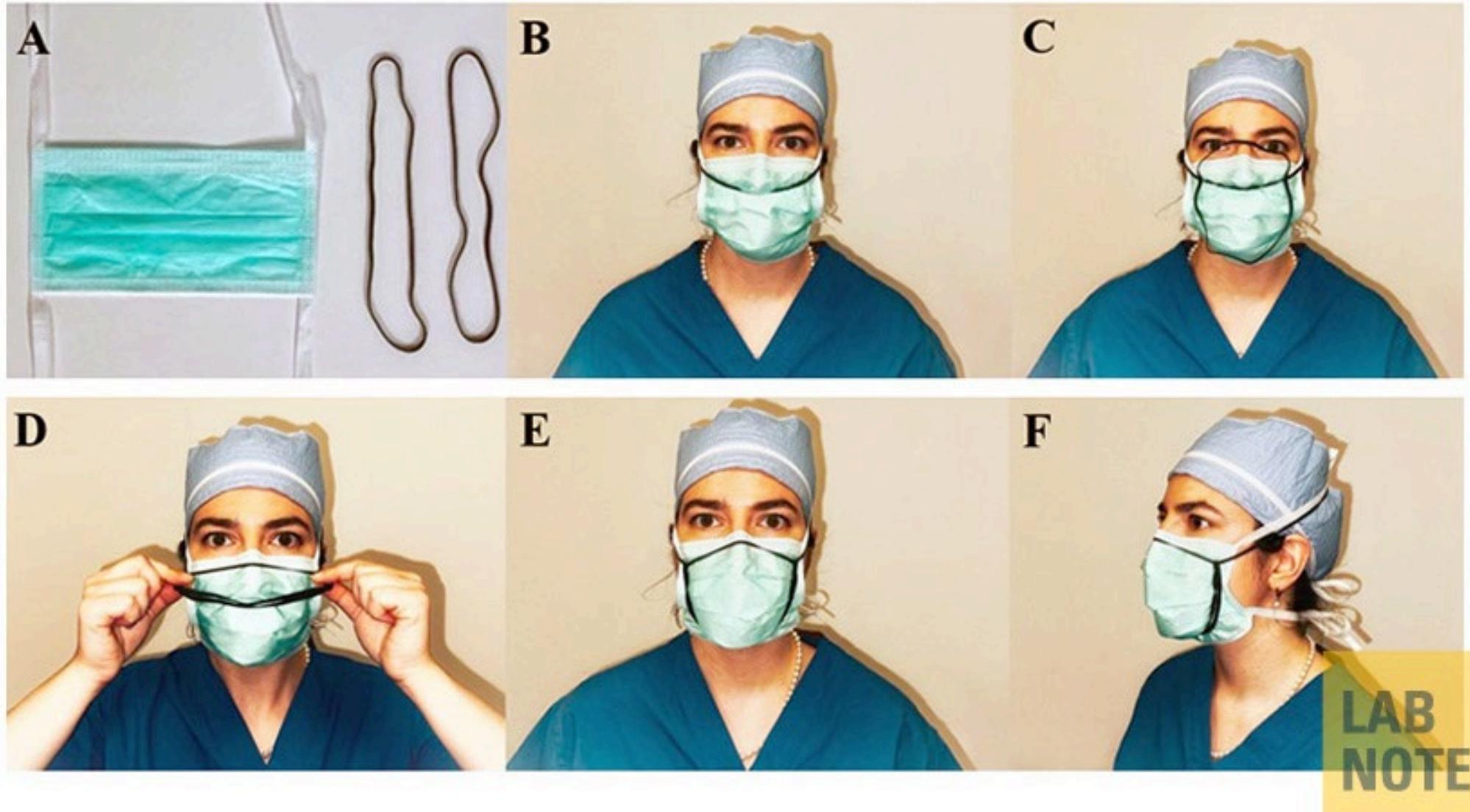


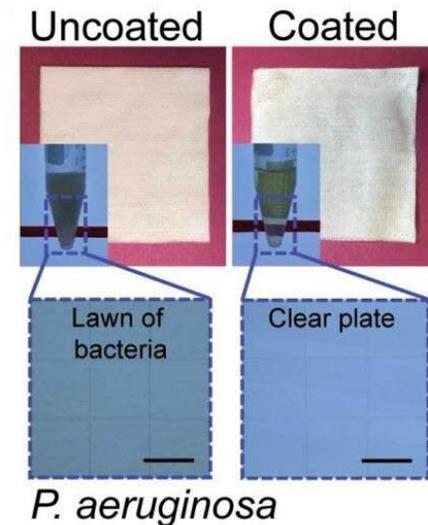
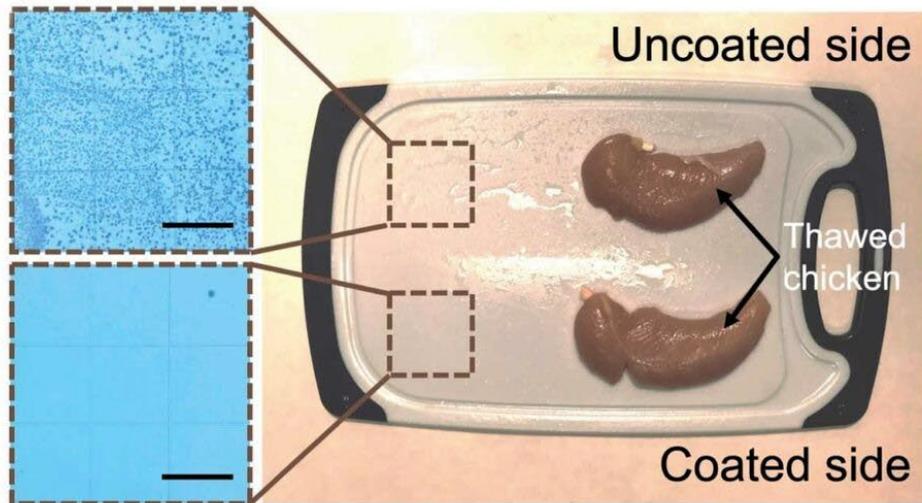
# Important to use the RIGHT tools at the RIGHT time



**Figure 2.** Timing of interventions during the time course of COVID-19.

# Adding rubber bands to surgical masks

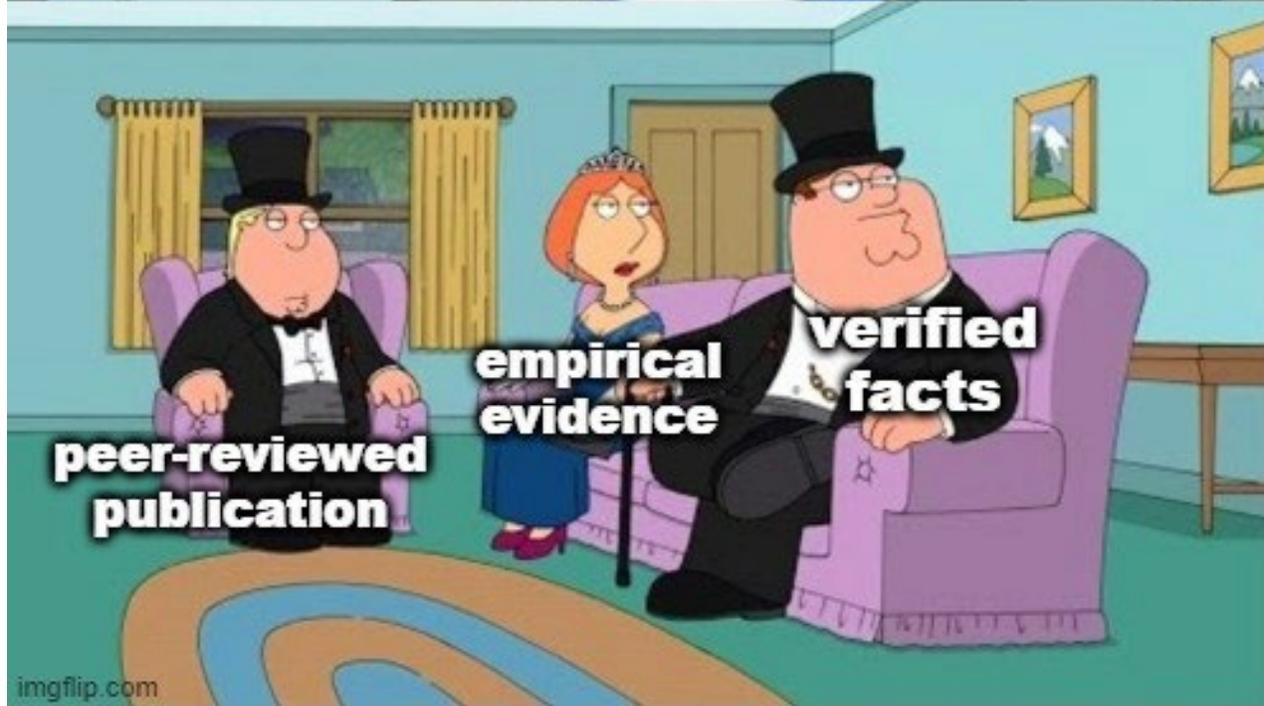




# Surfaces with disinfectant surface activity coating

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# The Social Media Shortcut