

Global Health Cast 20

November 15th, 2022



Dr. Melvin Sanicas

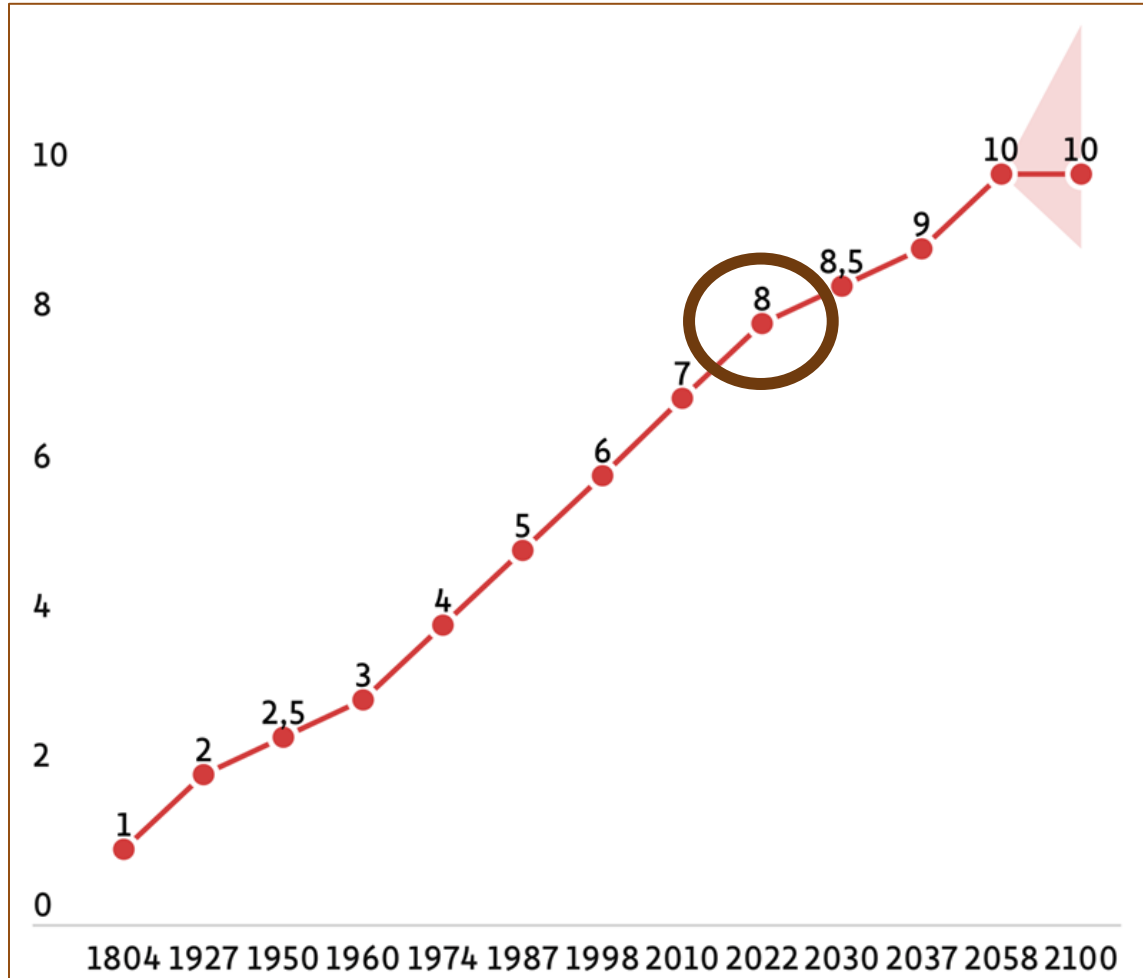


Prof. Dr. Joe Schmitt

Every Tuesday

12.00 noon - CET

Today the earth will grow to hold 8 bn humans

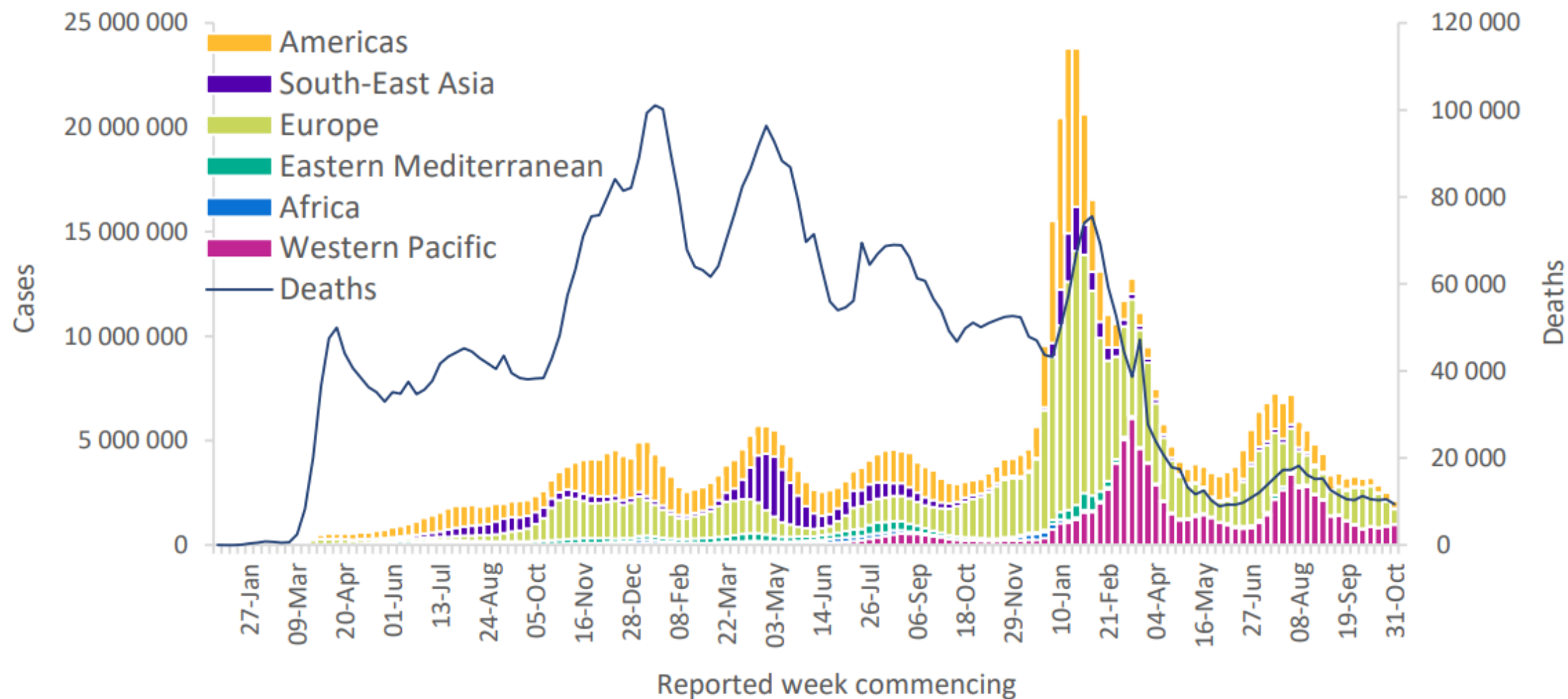


- ▶ **As of today there will be 8 billion humans**
- ▶ 216.000 newborns join the world population every day
 - ▶ 9000 each hour, 150 every minute.
- ▶ Low and middle income countries are the drivers for population growth.
 - ▶ Pakistan, India, The Philippines,
 - ▶ Egypt, Ethiopia, Nigeria, Tansania, Kongo
- ▶ 9 bn will be reach in 15 years but the 10 bn only 21 years later
- ▶ Germany , Japan, China, Russia have decreasing populations

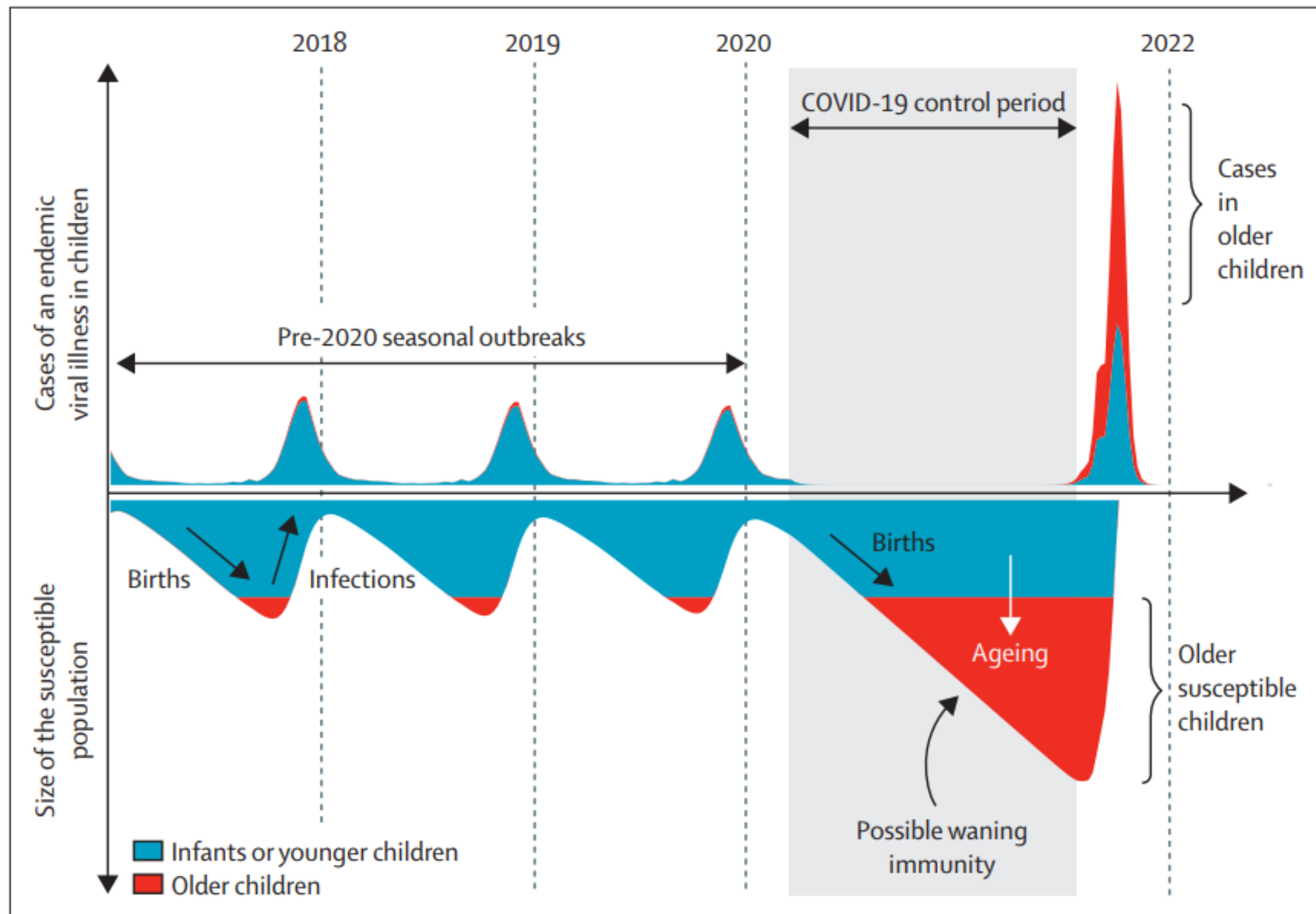
What we talk about today

- Human population to grow to 8 billion for the first time today
- COVID-19 update
- Death due to COVID-19 in children and young people
- Anti-COVID19 Antibodies and Effectiveness
- Third and fourth booster effectiveness in Thailand
- Monkeypox Natural History
- COVID-19 incidence and masking policy

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 6 November 2022**



Paediatric ARI after COVID-19 pandemic disruption



Daily new confirmed COVID-19 deaths per million people

Our World
in Data

7-day rolling average. Due to varying protocols and challenges in the attribution of the cause of death, the number of confirmed deaths may not accurately represent the true number of deaths caused by COVID-19.



GENEVA (AP) — The World Health Organization (WHO) chief on Wednesday said a nearly 90% drop in recent COVID-19 deaths globally compared to nine months ago provides “cause for optimism,” but still urged vigilance against the pandemic as variants continue to crop up.

Director-General Tedros Adhanom Ghebreyesus said that last week just over 9,400 deaths linked to the coronavirus were reported to the WHO. In February of this year, he said, weekly deaths had topped 75,000 globally.

“We have come a long way, and this is definitely cause for optimism. But we continue to call on all governments, communities and individuals to remain vigilant,” he said at a virtual news conference from the WHO’s Geneva headquarters.

“Almost 10,000 deaths a week is 10,000 too many for a disease that can be prevented and treated.”






Source: Johns Hopkins University CSSE COVID-19 Data

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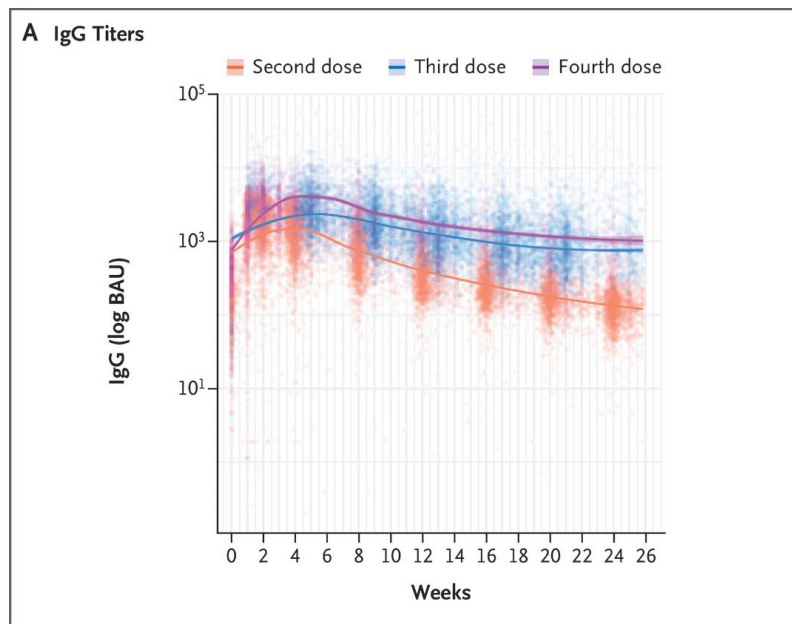
COVID-19 deaths in children and young people in England, March 2020 to December 2021: An active prospective national surveillance study

Marta Bertran , Zahin Amin-Chowdhury , Hannah G. Davies, Hester Allen, Tom Clare, Chloe Davison, Mary Sinnathamby, Giulia Seghezze, Meaghan Kall, Hannah Williams, Nick Gent, Mary E. Ramsay, Shamez N. Ladhani  , Godwin Oligbu 

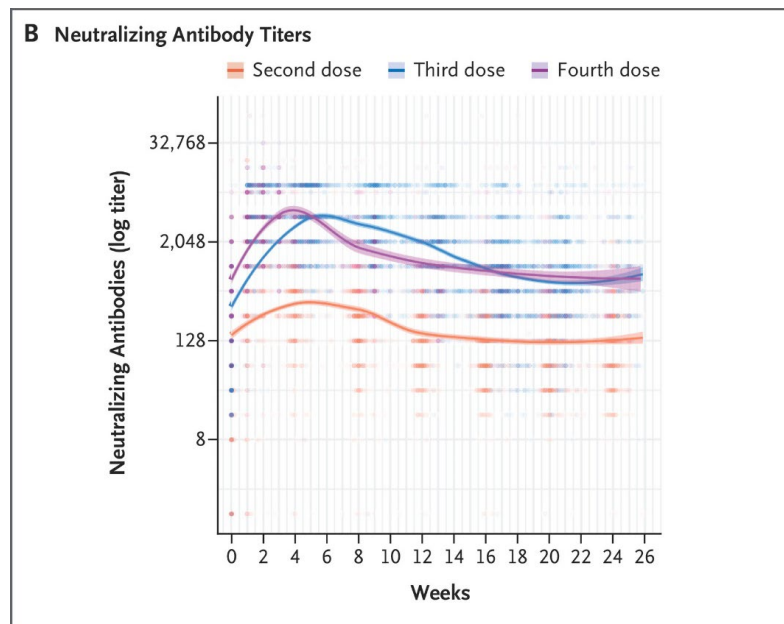
Published: November 8, 2022 • <https://doi.org/10.1371/journal.pmed.1004118>

- Approximately 75% had significant underlying health conditions, mainly severe neurodisability, and immunocompromising conditions.
- SARS-CoV-2 was responsible for 1.2% (81/6,790) of all deaths in <20-year-olds, with an infection fatality rate of 0.70/100,000 SARS-CoV-2 infections.
- Death due to COVID-19 is very low in children and young people (CYP), even with the emergence of new SARS-CoV-2 variants.
- Most COVID-19 deaths occurred in CYP with underlying health conditions.

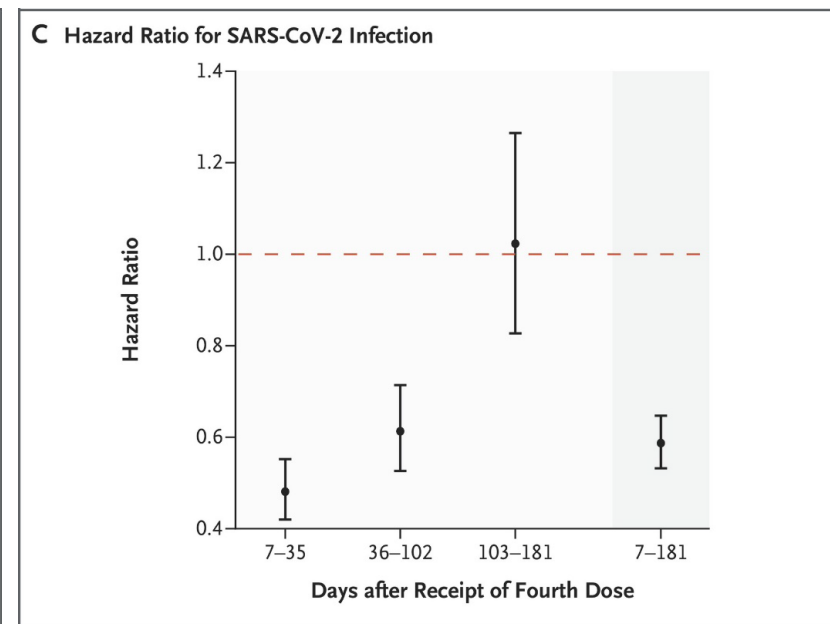
Anti-COVID19 Antibodies and Effectiveness



A: IgG (ELISA) after 2nd, 3rd or 4th dose





B: NT antibodies after 2nd, 3rd or 4th dose



C: Effectiveness (1-HR; 1 = not effective)



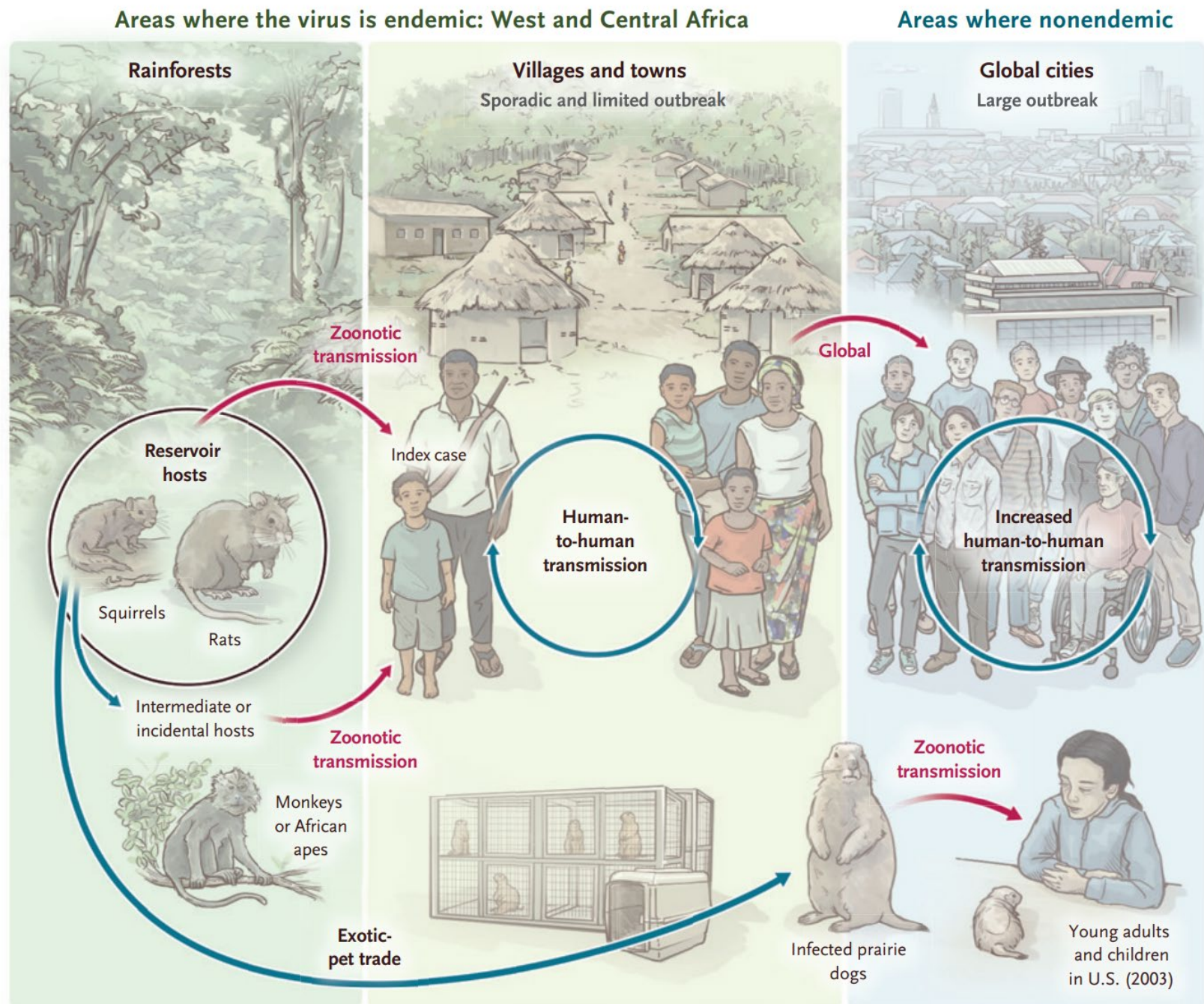
Heterologous third and fourth dose vaccines reduce severity and mortality in COVID-19 patients during the periods of delta and omicron predominance in Thailand

Kannikar Intawong ^{a, 1}, Suwat Chariyalertsak ^{a, 1}  , Kittipan Chalom ^b, Thanachol Wonghirundecha ^b, Woravut Kowatcharakul ^c, Pisittawoot Ayood ^b, Aksara Thongprachum ^a, Narain Chotirosniramit ^d, Kajohnsak Noppakun ^d, Krit Khwanngern ^d, Worachet Teacharak ^e, Prapon Piamanant ^e, PimpinanKhammawan ^e

SUMMARY:

- Third vaccine dose reduced the risk of severe COVID-19 with Omicron
- Optimal protection seen with third dose given 14–90 days before positive test
- No severe COVID-19 outcomes or deaths with fourth vaccine dose
- Boosters with BNT162b2, ChAdOx1 and mRNA-1273 offered similar protection

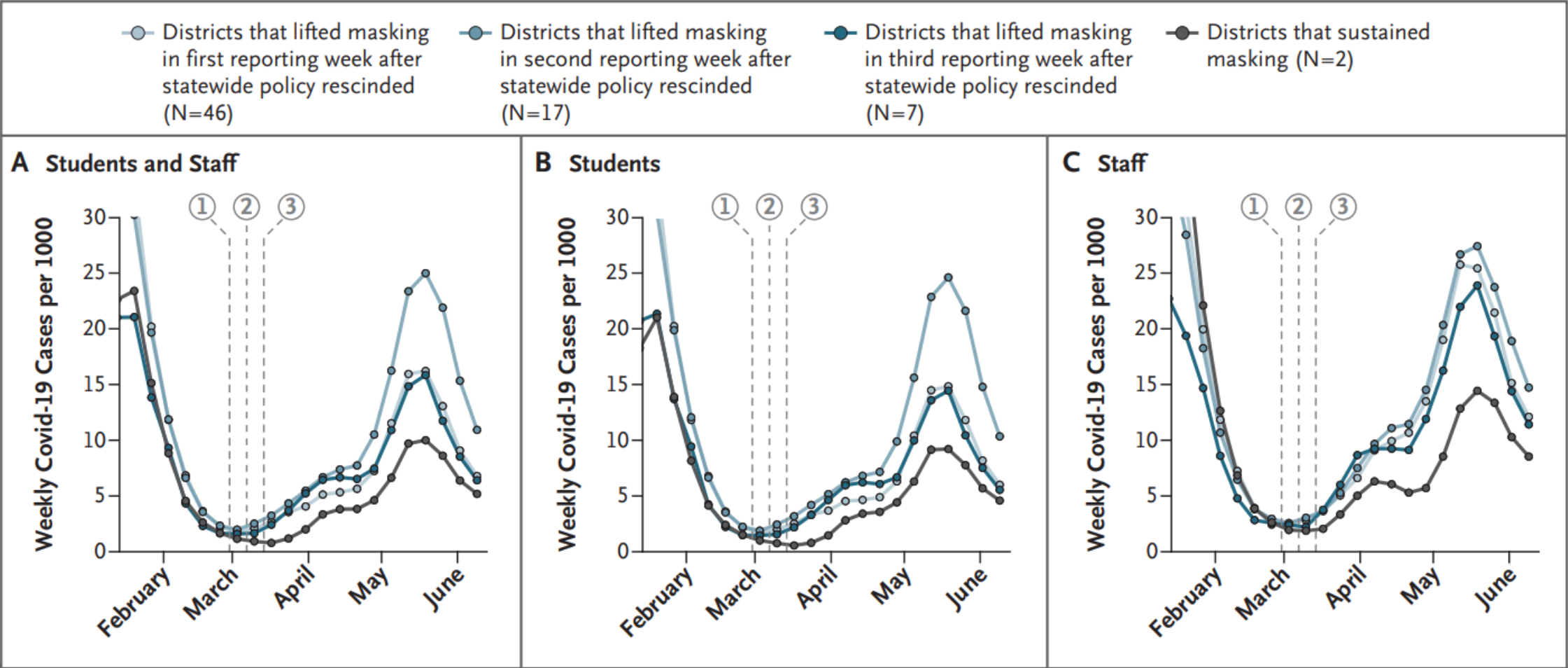
MPx: Natural History



“Classical” and “New” Monkeypox

Variable	Classic Form, 1970s to the Present	New Clinical–Epidemiologic Form, 2022
Location	Central and West Africa	Countries where monkeypox is not endemic (Europe, North and South America, Middle East, Australia)
Affected population	Children and young adults (age at diagnosis increasing since 1980)	Young men who have sex with men (age, 31–40 yr)
Epidemiologic features	Sporadic cases and epidemics	Pandemic under way since May 2022
Transmission	Contact with infected animal reservoir (probably rodents), followed by human-to-human transmission	Exclusively human-to-human transmission
Dissemination	Mostly intrafamilial and limited nosocomial dissemination	Mostly sexual networking, condomless sex with multiple male partners
Clinical phase	Incubation, prodromal stage, eruption phase with skin lesions	Incubation, prodromal stage (not always present), eruption phase with lesions in an unusual distribution, especially on the genitals
Symptoms	Lesions on the face and extremities, with centrifugal distribution, often associated with cervical or axillary lymphadenopathy	Penile rash, perianal lesions, ulcerative lesions and vesicular rash, painful inguinal lymphadenopathy, pharyngitis, proctitis
Viruses	Central African and West African clades (clades 1 and 2, respectively)	West African variant (clade 3)
Case fatality rate (%)	1–15	0.025

Incidence of COVID-19 in School Districts in Greater Boston area before/after Statewide Masking Policy was rescinded



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**You see the world not as
it is but as you are or as you
have been conditioned to see it.**

