

# Policy considerations for booster vaccination

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Alejandro Cravioto, Chair Strategic Advisory Group of Experts on Immunization (SAGE)

# WHO calls for a pause to think about the need for booster vaccination



WHO is calling for a moratorium on Boosters until at least the end of September to enable at least 10% of the population of every country to be vaccinated.

## Equity first:

Dr Tedros had requested international support to promote global vaccinations with the goal of enabling a minimum of 10 per cent of each country's population to be vaccinated by the end of September.

With more than half of the time already elapsed, he regretted that too little progress had been made towards that goal and even less towards the target of vaccinating 30 per cent by the end of this year.

<https://www.youtube.com/watch?v=ST4MV0JwwKI>

# What is the rationale for booster doses?

- **Waning protection** over time against infection or disease, in particular severe disease (i.e., waning immunity).
- **Reduced protection** against variant(s) of concern (VOCs).
- **Inadequate protection** from the currently recommended primary vaccination series for some risk groups (or for which evidence from the Phase 3 clinical trials may have been lacking).
- *The rationale for booster doses **may differ by vaccine product**, epidemiological setting, risk group, and vaccine coverage rates.*

# Key considerations for policy



- Assessing immune parameters over time (binding, neutralizing antibodies):
  - Interpretation is difficult in the absence of a **correlate for protection**; observed short term association with antibody titres may not apply in the long term, and may vary by outcome (infection, disease, severe disease)  
(see also Khoury et al., <https://www.nature.com/articles/s41591-021-01377-8>)
- Waning vaccine effectiveness
  - Assessing effectiveness over time has many confounders. Which outcomes should drive decision? Should we focus on severe disease/death only? What is the best study design to document waning effectiveness?
- Global and national equity considerations
  - Offering booster doses to a large proportion of a population when many have not yet received even a first dose undermines the principle of national and global equity.

## 1. Assessing the need for booster doses:

- Epidemiology of breakthrough cases **over time** and **disease severity**
- **Subgroup analysis** including immunocompromised, older frail adults, groups with high risk of exposure, type of vaccine, HIV+ with low CD4 counts, circulating variants of concern (VOCs)
- **Vaccine-specific** data in context of **circulating VoC's** from RCT's and observational studies.
- **Supplementary evidence** from immunological studies assessing neutralizing antibodies over time as well as biomarkers of cellular immunity when possible.

## 2. Assessing the performance of booster doses

- Immunogenicity and safety, preferentially effectiveness and duration of protection of vaccine booster doses in the context of SARS-CoV-2 wild-type and VOCs.

## 3. Additional considerations:

- Optimal timing for the booster dose, consideration of homologous versus heterologous boosters, possibility for dose-sparing, booster needs in previously infected individuals, identification and targeting of high-risk populations, programmatic feasibility and sustainability, promotion of global equity.

WHO/SAGE statement on booster doses (10 Aug 2021)

<https://www.who.int/news/item/10-08-2021-interim-statement-on-covid-19-vaccine-booster-doses>