

GLOBAL ACCESS TO VACCINES: What's at stake? What are the challenges?

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Boston University Center for Emerging
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Boston University Center for Emerging Infectious Diseases
Policy & Research



Mission: Improve societal resilience against the threat of emerging and epidemic infectious diseases worldwide through research, training, and advocacy.

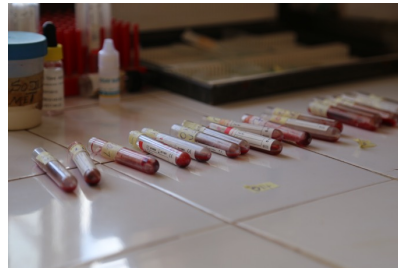
Focus:

- Community and Health System Resilience
- Responsible and Responsive Governance
- Combating Disinformation and Improving Trust
- Driving and Adapting Social and Technical Innovation

Projects: Transdisciplinary research, global and local capacity building, evidence generation for policy support, community engagement.

To learn more about us and support our work:

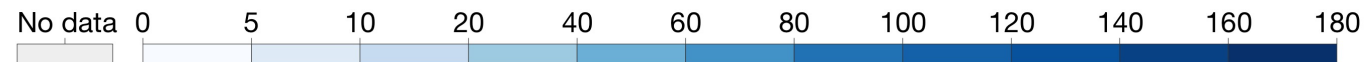
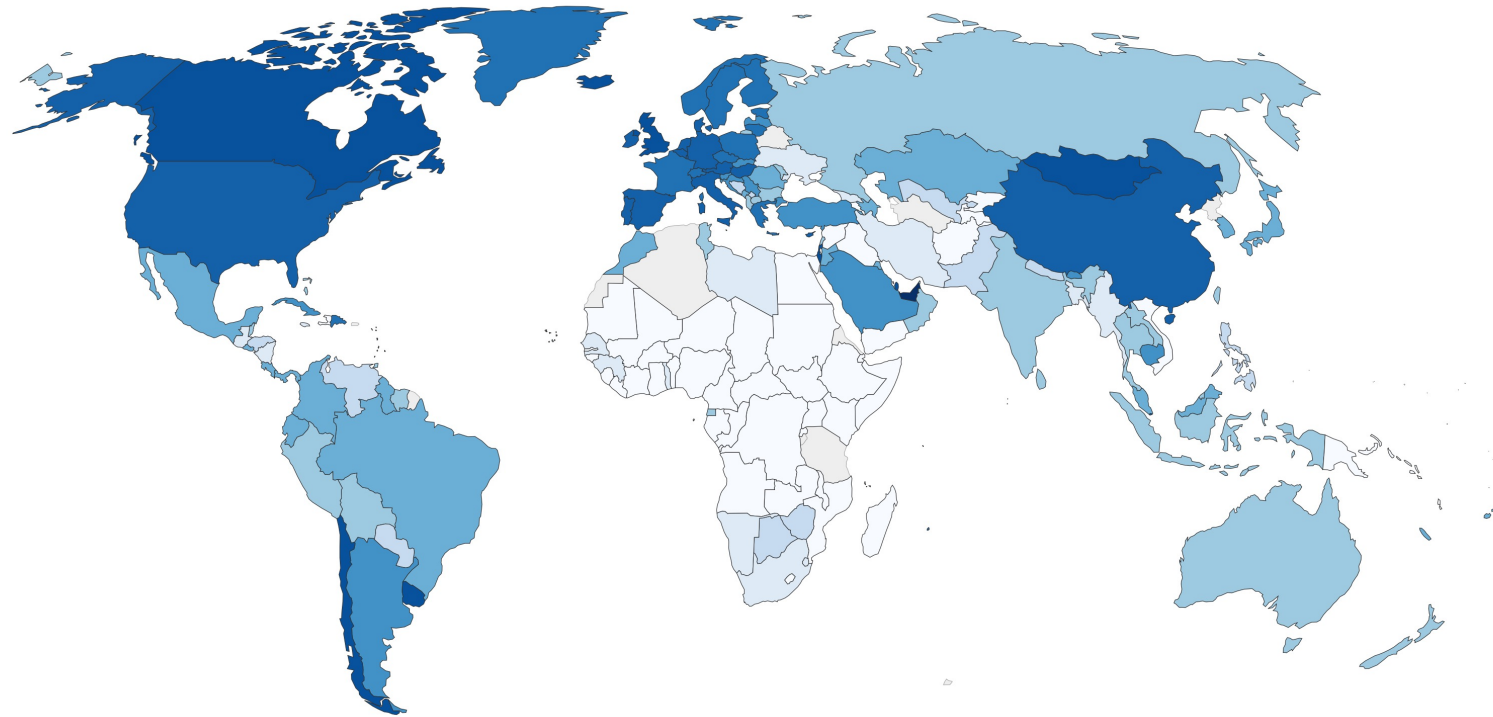
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COVID-19 vaccine doses administered per 100 people

For vaccines that require multiple doses, each individual dose is counted. As the same person may receive more than one dose, the number of doses per 100 people can be higher than 100.

Our World
in Data



Source: Official data collated by Our World in Data – Last updated 20 July 2021, 10:30 (London time) OurWorldInData.org/coronavirus • CC BY

COVID-19 Pandemic By The Numbers

- Over 174M cases, 3.76M deaths (incl at least 115K healthcare workers)
- Additional 95M pushed into extreme poverty
- Additional 130M pushed to brink of starvation
- Delayed routine immunization to 23M
- Over 1M undiagnosed and untreated for TB
- Over 1.54B children out of school
- Inequity in vaccine distribution could lead to world economy losing up to \$9 trillion according to International Chamber of Commerce

Source: US Global Leadership Coalition, WHO

Impacts of vaccine inequity

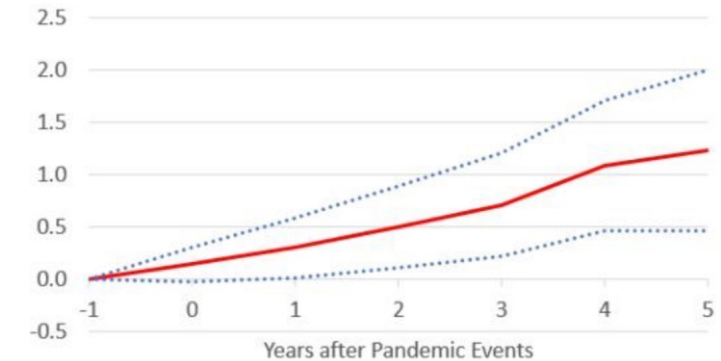
- Increased detrimental impact of direct and indirect health indicators
 - Healthcare worker illness, increased overall case fatality
 - Worsening response to other medical needs
 - Potential decreased detection of new infectious diseases threats
 - Psychosocial effects
- Global risk from evolution of new variants
- Impact on women's empowerment, health and education indicators
- Impact of environmental indicators
- Political and social instability
- Global trade & economic impacts: US\$ 1.5–9.2 trillion (US costs: \$ 45 billion to US\$ 1.38 trillion)

The Gap Widens

Pandemics progressively widen the gap between rich and poor, as measured by the net Gini coefficient, a common measure of inequality.

Average response (with associated confidence bands) of the net Gini to a pandemic for 175 countries, 1961–2017.

(change in Gini net, percent)



Source: Furceri, Loungani, Ostry, and Pizzuto (2020).

INTERNATIONAL MONETARY FUND

Source: International Chamber of Commerce (2021)

Threat of New Variants

- New infections offer chances for viral evolution
- Mutations happen continuously, not all offer advantage
- Vaccines offer broad based protection so new variants likely won't lead to complete ineffectiveness but rather reduced efficacy
- Efforts are underway to create more broad-based vaccines against epidemic prone coronaviruses



Photo: Bhadelia, N

COVAX: Goals And Real World Challenges

- Goals

- Provide investments & incentives to manufacturers
- Create collective purchasing power
- Utilize purchasing & contribution from self financing countries to ensure access for low- & middle-income countries

- Challenges

- Export control on vaccines & raw materials
- Lack of enough funding
- Competition for purchase with high income countries
- Getting vaccines to the last mile
- Vaccine hesitancy



Source: UN News (2021), GAVI (2020)

Roadmap to expansion of global manufacturing capacity

- Intellectual property rights waivers
- Technological “know how” transfer desire and mechanism
- Creating physical infrastructure
- Training and promoting local expertise
- Supply chain for raw materials
- Strengthening manufacturing and health regulatory capacity
- Strengthening health surveillance capacity

Global commitment today can have impact for this and future epidemics (and endemic diseases).

Source: Asundi, O’Leary & Bhadelia (2021)

What can we do today?

- Redistribute surplus
- Lift restrictions on raw material export
- Support expansion of “finish and fill” capacity as first step in areas that have infrastructure

The New York Times

Pfizer will turn to a plant in Africa to help supply the continent with vaccines next year.



The deal marks the first time Pfizer's Covid vaccine will be partly produced in Africa. Brett Carlsen for The New York Times

Thank you



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