

# Leveraging lessons from COVID-19 to improve adult immunization

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# COVID-19 vaccines: a triumph for science

## Nobel Prize goes to scientists behind mRNA Covid vaccines

🕒 2 October 2023



Nobel Prize



EPA



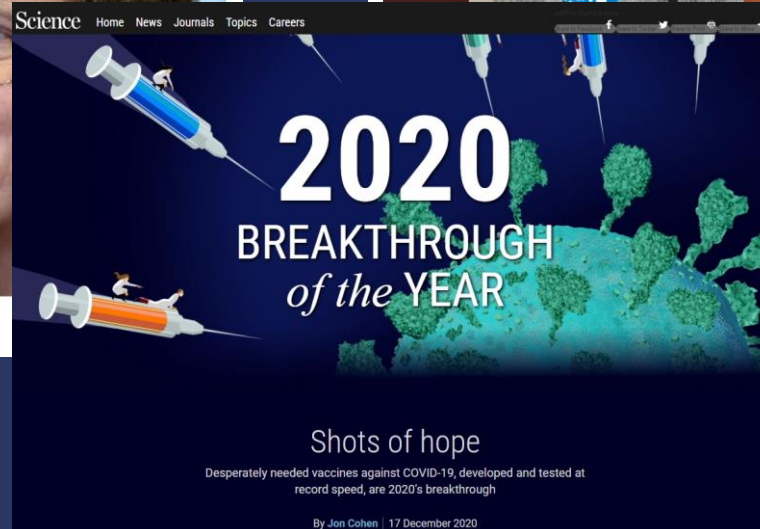
Professors Drew Weissman (left) and Katalin Kariko

## Covid-19 vaccine: First person receives Pfizer jab in UK

🕒 8 December 2020



Coronavirus



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## Statement – COVID-19 vaccines saved at least 1.4 million lives in the European Region

Statement by Dr Hans Henri P. Kluge, WHO Regional Director for Europe

16 January 2024 | Statement | Reading time: 3 min (936 words)

16 January 2024 - Statement to the Pre... | Watch later | Share

Published by an international health authority

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Estimated number of lives directly saved by COVID-19 vaccination programs in the WHO European Region, December 2020 to March 2023

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## Building on a history of vaccine successes

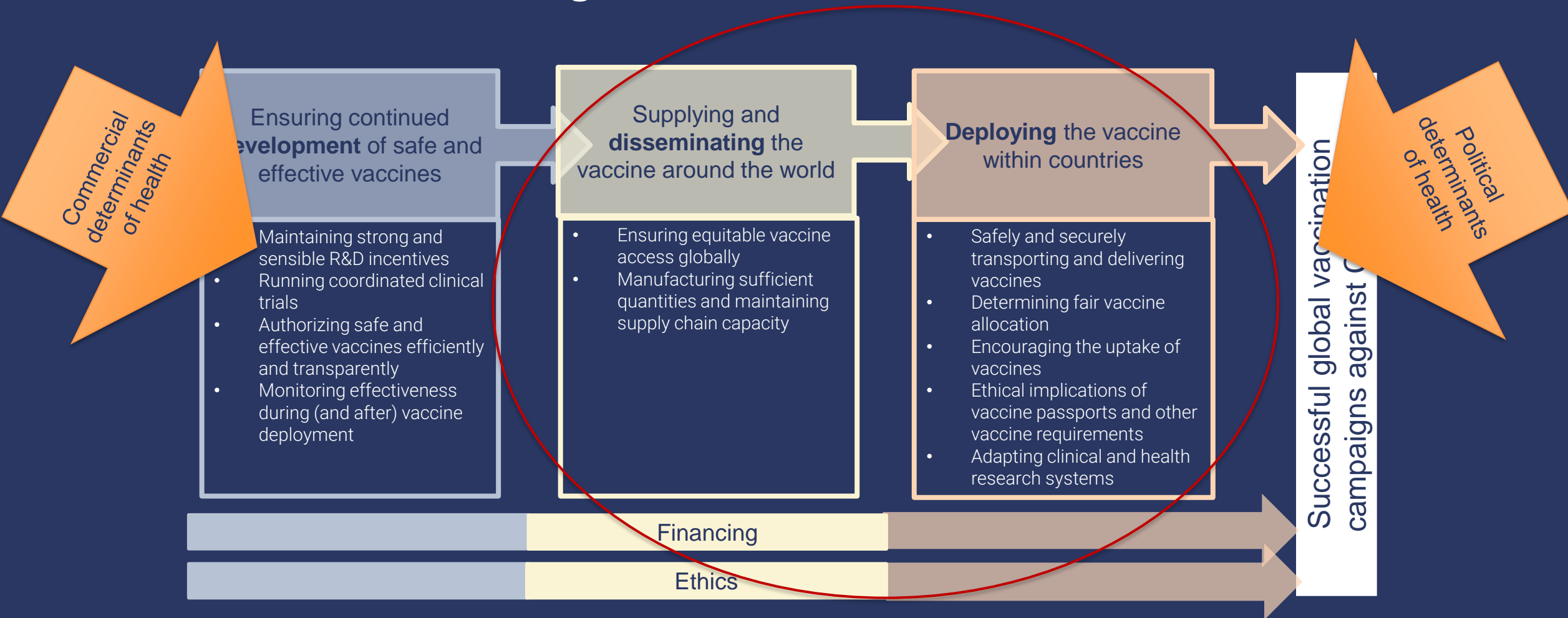
- Eradication of smallpox
- Near eradication of polio
- Significant reduction in global measles mortality
- Diphtheria, tetanus and pertussis (DTP) – first combination vaccine

- Safe and effective vaccines available to protect against **25+** diseases
- **4 million** deaths averted by childhood vaccination annually
- For every \$1 spent on immunization in LMICs, there is a **\$52 return on investment**

CDC. 2023. "Fast Facts on Global Immunization." Centers for Disease Control and Prevention. April 20, 2023.

<https://www.cdc.gov/globalhealth/immunization/data/fast-facts.html>.

# COVID-19 vaccine challenges

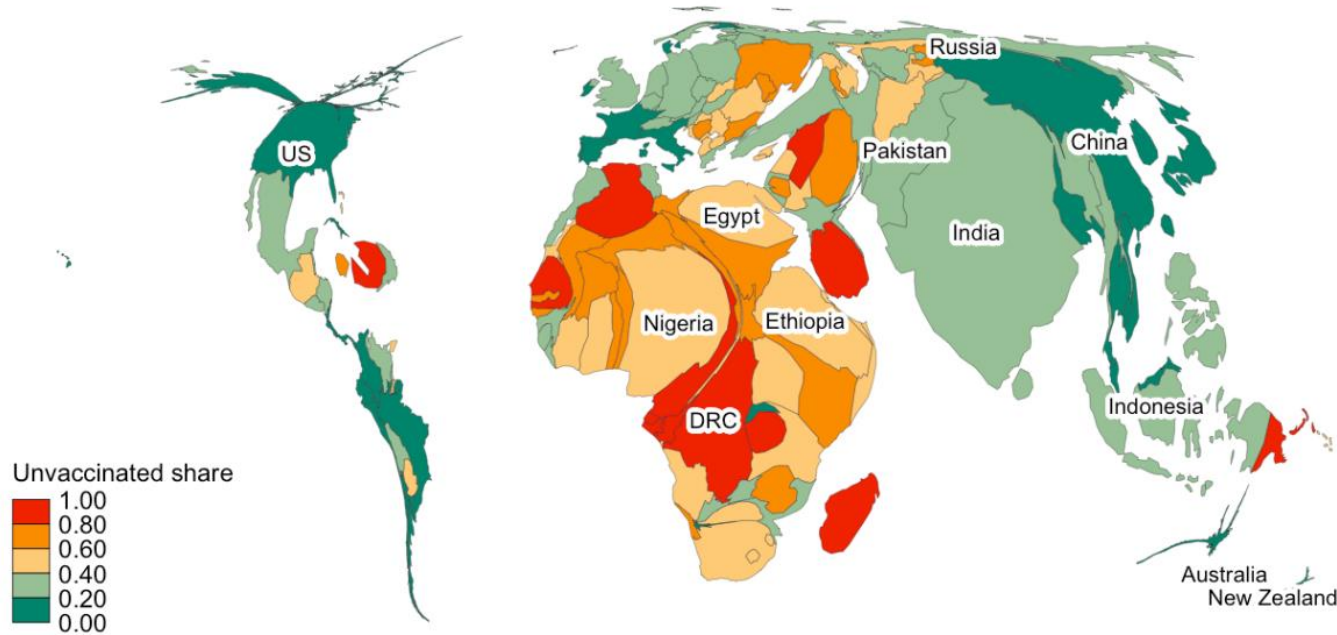


Forman, Rebecca, Soleil Shah, Patrick Jeurissen, Mark Jit, and Elias Mossialos. 2021. "COVID-19 Vaccine Challenges: What Have We Learned so Far and What Remains to Be Done?" Health Policy 125 (5). <https://doi.org/10.1016/j.healthpol.2021.03.013>.

# COVID-19 vaccine equity challenges

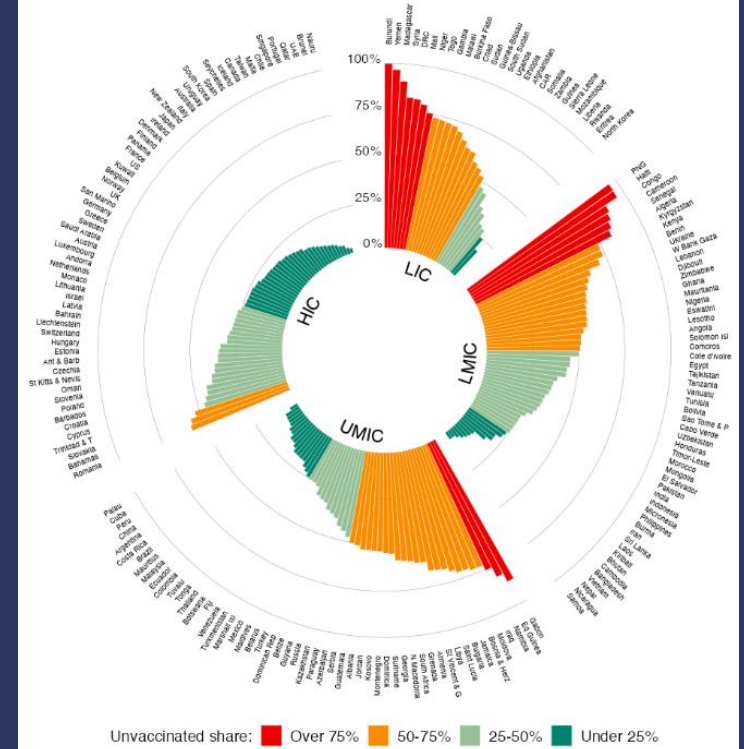
## Our unvaccinated world

Land mass = count of people unvaccinated against COVID (2.2 billion globally) and color = their share in total population



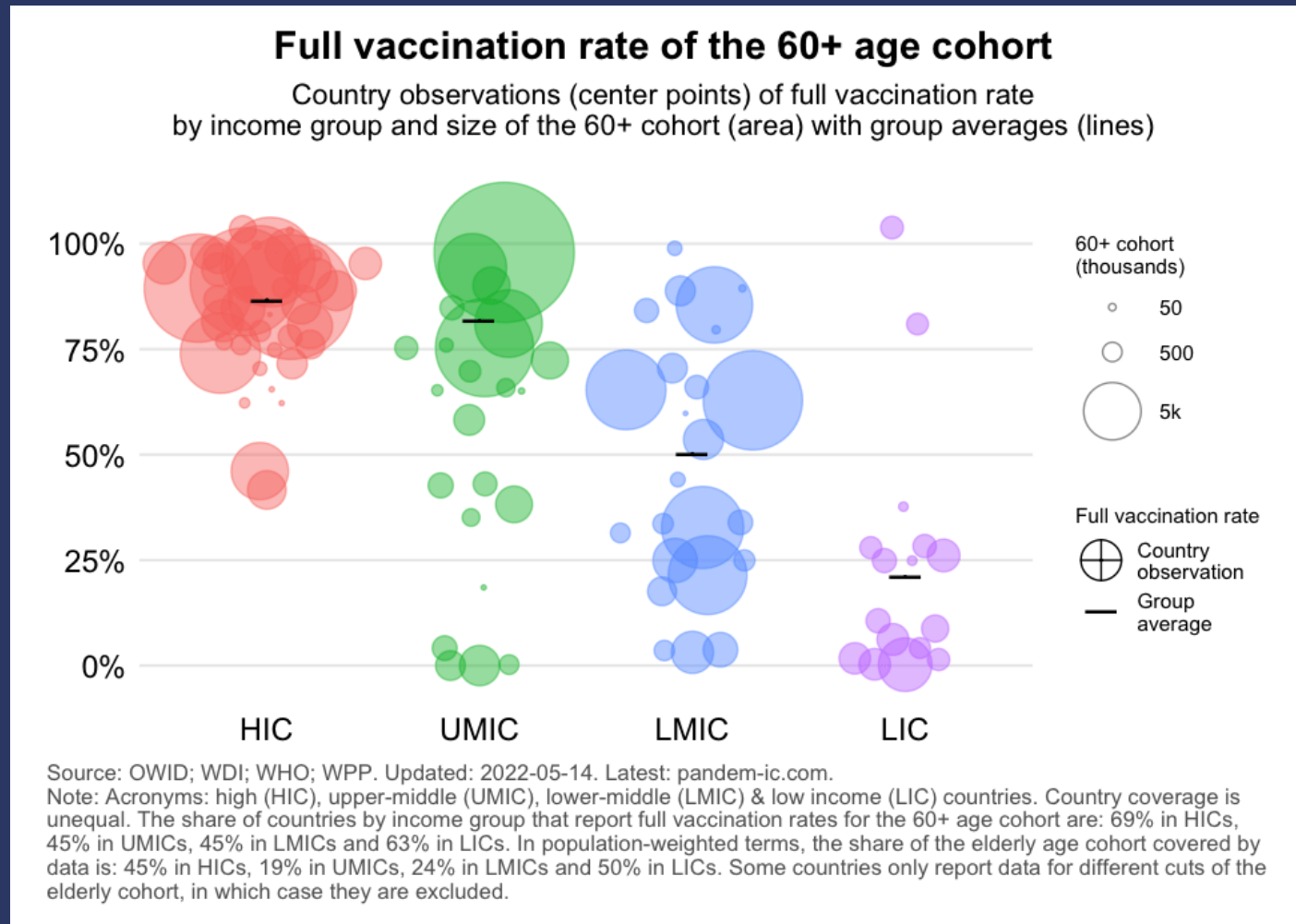
Source: OWID; WPP. Updated: 2024-04-04. Note: Gastner-Seguy-More cartogram based on WGS84 projection. Made with cartogramR and mapsf. The 10 countries with the largest unvaccinated population are labeled. Australia and New Zealand are also labeled to help locate them on the cartogram.

## Share of the unvaccinated in population by World Bank country income group



Source: OWID; WPP. Updated: 2024-04-04. Latest: pandem-ic.com.  
 Note: Acronyms: high (HIC), upper-middle (UMIC), lower-middle (LMIC) & low income (LIC) countries.

# COVID-19 vaccine equity challenges



Philip. 2024. "Elderly vaccination is poorly targeted globally." Pandem-Ic. May 14, 2022.

<https://pandem-ic.com/elderly-vaccination-is-poorly-targeted-globally/>.

## COVID-19 vaccine challenges (continued)

	Manufacturing enough and maintaining supply chain capacity
	Safely and securely transporting vaccines
	Determining fair vaccine allocation
	Encouraging uptake of vaccines
	Ethical implications of vaccine passports and other vaccine requirements
	Adapting clinical and health research systems

# Considerations for the future: best practices/target areas for change

*List of selected considerations for stakeholders (non-exhaustive and in no particular order)*

- **Multisectoral approaches**
- Supply chain strengthening & planning
- Determining fair, cost-effective allocation in a transparent way
- **Adapting clinical and health research systems based on the latest developments**
- Effective communication around vaccines and side-effects which builds understanding and trust
- Inclusive vaccine campaigns sensitive to target population contexts and barriers to uptake
- Donation plans/policies in place
- Innovative financing mechanisms for vaccines considered
- **Alignment/coordination** on regulatory processes and transparency/communication clarifying differences
- Consensus on post-market surveillance measures
- Considerations of the likely positive and negative consequences and feasibility of vaccine requirements



# Considerations for the future: intersectoral/multisectoral approaches

Amri, Chatur & O'Campo's (2022) enablers and barriers to intersectoral/multisectoral approaches to health policy

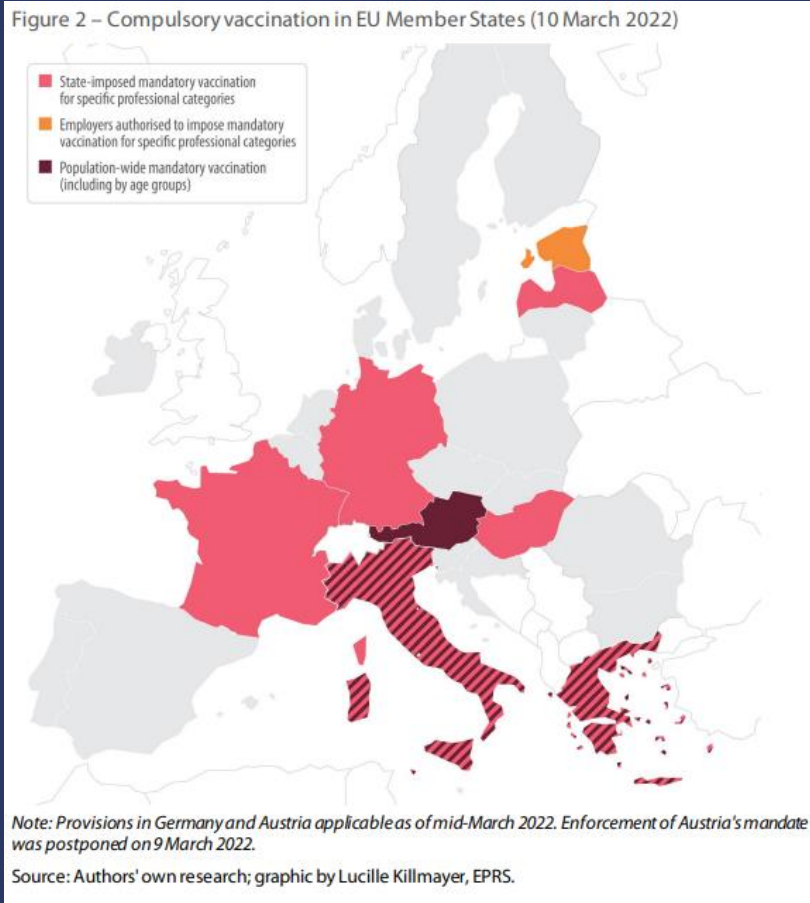
<h2>Enablers</h2>	<ol style="list-style-type: none"> <li>1. Systems for liaising and engaged communication</li> <li>2. Political leadership</li> <li>3. Shared vision or common goals (win-win strategies)</li> <li>4. Education and access to information</li> <li>5. Funding</li> </ol>
<h2>Barriers</h2>	<ol style="list-style-type: none"> <li>1. Lack of shared vision across sectors</li> <li>2. Lack of funding</li> <li>3. Lack of political leadership</li> <li>4. Lack of ownership and accountability</li> <li>5. Insufficient and unavailable indicators and data</li> </ol>



Amri, Michelle, Ali Chatur, and Patricia O'Campo. 2022. "An Umbrella Review of Intersectoral and Multisectoral Approaches to Health Policy." *Social Science & Medicine*, October, 115469. <https://doi.org/10.1016/j.socscimed.2022.115469>.

Pan-European Commission on Health and Sustainable Development. 2021. "Drawing Light from the Pandemic: A New Strategy for Health and Sustainable Development." [www.who.int](http://www.who.int). WHO Regional Office for Europe. August 31, 2021. <https://www.who.int/europe/publications/m/item/drawing-light-from-the-pandemic--a-new-strategy-for-health-and-sustainable-development>. Schellekens,

# Considerations for the future: harmonization of some vaccine policies and clearer communication around divergences in the Region



Diaz Crego, Maria, Costica Dumbrava, David De Groot, Silvia Kotanidis, and Maria-Margarita Mentzelopoulou. 2022. "Legal Issues Surrounding Compulsory Covid-19 Vaccination." [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/729309/EPRS\\_BRI\(2022\)729309\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/729309/EPRS_BRI(2022)729309_EN.pdf).

	Austria	Denmark	England	France	Germany	Ireland	Italy	Netherlands	Poland	Spain
Total vaccinations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
First vaccinations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Second vaccinations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
First boosters	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Second boosters	Unclear	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes
Vaccines per manufacturer	No	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes
Vaccines per age group	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vaccines per sub-national region	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Vaccines per type of vaccine administrator	No	No	No	No	Yes	No	Yes	No	No	No
Vaccines per day	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vaccines per sex/gender	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vaccines administered to vulnerable people	No	No	Yes	Yes	Yes	Yes	No	No	No	No
Vaccines wasted	No	No	No	No	No	No	No	No	Yes	No

Fig. 1

A heat map of the presence (green) or absence (red) of public data on COVID-19 vaccines and vaccination strategies collected from ten European countries and made available within days after vaccination. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

Van Kessel, Robin, Rebecca Forman, Ricarda Milstein, Alicja Mastylak, Katarzyna Czabanowska, Thomas Cypionka, Isabelle Durand-Zaleski, et al. 2023. "Divergent COVID-19 Vaccine Policies: Policy Mapping of Ten European Countries." *Vaccine* 41 (17): 2804–10. <https://doi.org/10.1016/j.vaccine.2023.03.036>.

## Considerations for the future: adapting and training in clinical and health research settings



- Adapting settings and personnel to be able to deliver necessary vaccines
- Keeping health professionals up to date with latest developments/changes, especially under crisis circumstances such as COVID-19
- Improving communication capacity
  - Delivering information on side effects
  - Addressing vaccine hesitancy

# Cooperation, collaboration and coordination to improve efficiency, sustainability and robustness

- Intersectoral task forces
- Public private partnerships
- Legal frameworks
- Resource pooling
- Shared data platforms
- Established and regular communication lines



# Conclusions

- Opportunity to learn lessons from COVID-19 experience for future adult immunization efforts
- COVID-19 vaccines had both successes and challenges
- These have highlighted a long list of considerations around potential organizational best practices. For example:
  - Multisectoral engagements
  - Convergence when appropriate in vaccine policy making; effective communication around necessary divergences in vaccine policy
  - Adaptive and well-trained personnel to deliver and communicate about vaccines
- Coordination, cooperation, and collaboration are key in adult immunization efforts



# Thank you.

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*Thanks also to co-authors, including:*

Professor Elias Mossialos  
Dr Robin van Kessel  
Dr Michael Anderson  
Dr Soleil Shah  
Dr Ricarda Milstein  
Dr Olivier Wouters  
Professor Mark Jit

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