

Advancing Pandemic and Seasonal Influenza Vaccine Preparedness and Response: Harnessing Lessons from the Efforts Mitigating the COVID-19 Pandemic

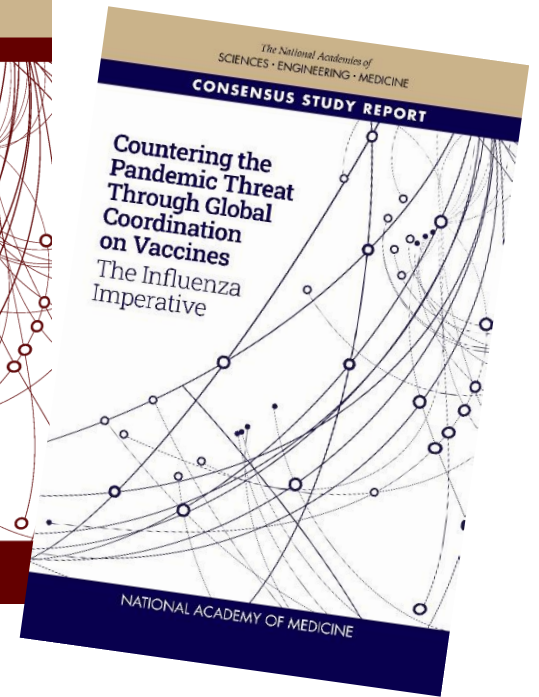
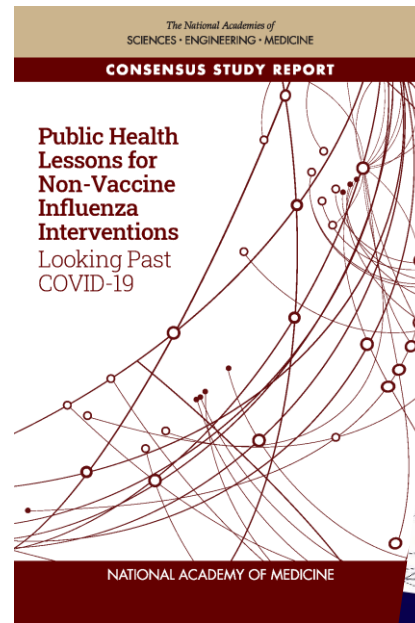
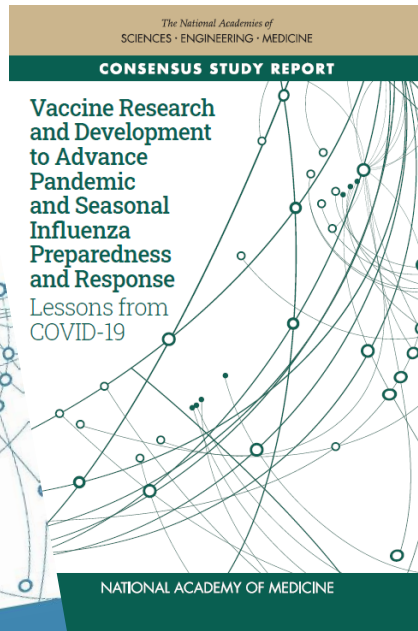
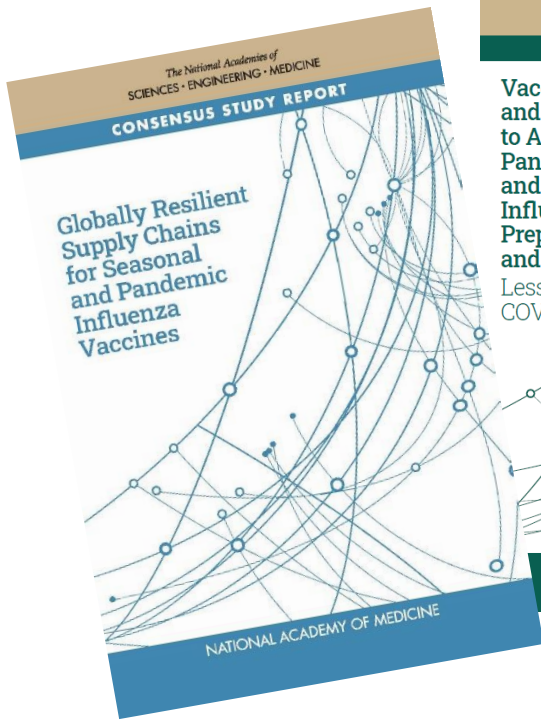


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Background

- Distill lessons learned from COVID-19 that could be critical in advancing future influenza preparedness efforts
- We are not adequately prepared for a novel pandemic influenza strain, and we must be
- We must start implementing these lessons learned immediately





Vaccine Research and Development to Advance Pandemic and Seasonal Influenza Preparedness and Response: Lessons from COVID-19



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Committee Approach

The rapid development of COVID-19 vaccines has demonstrated what is possible when researchers have the necessary resources and novel technologies to conduct and apply their research, and with rolling review by regulators and public-private partnerships as well as extensive data sharing.

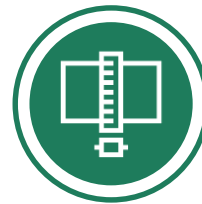
During the initial committee meeting, it was decided that the issues fit within four key dimensions which were used to structure meetings and the report.



Basic and Translational
Science



Clinical
Science



Manufacturing
Science



Regulatory
Science

Summary of Recommendations

- Having vaccines earlier and ensuring they are widely and equitably available – including through building vaccine production and distribution capacity in LMICs – in a future influenza pandemic could significantly reduce both the burden of disease and social and economic consequences both domestically and around the world.
- The committee believes that by following these recommendations, the world can leverage what has been learned so far from the COVID-19 pandemic to effectively prepare for the next influenza outbreak.



Public Health Lessons for Non-Vaccine Influenza Interventions: Looking Past COVID-19



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Summary of Recommendations - Surveillance

- The WHO, World Bank, and national centers for disease control should work collaboratively to build sustainable capacity for routine surveillance in animals.
- Incentives need to be built into systems for more rapid reporting of surveillance data and disincentives/barriers to reporting should be removed.
- WHO and regional disease control agencies should work with countries, to harmonize, coordinate and optimize surveillance activities, data collection and sharing.

Summary of Recommendations - Resources

- Global and regional health organizations should collaborate to determine how therapeutics and the resources needed for their delivery can be shared between countries to ensure equitable distribution and control pandemic spread.
- Governments and private companies should focus their efforts on research strategies and platforms that were shown to be particularly effective during the COVID-19 pandemic to include developing and maintaining national and international research collaboratives.



Globally Resilient Supply Chains for Seasonal and Pandemic Influenza Vaccines



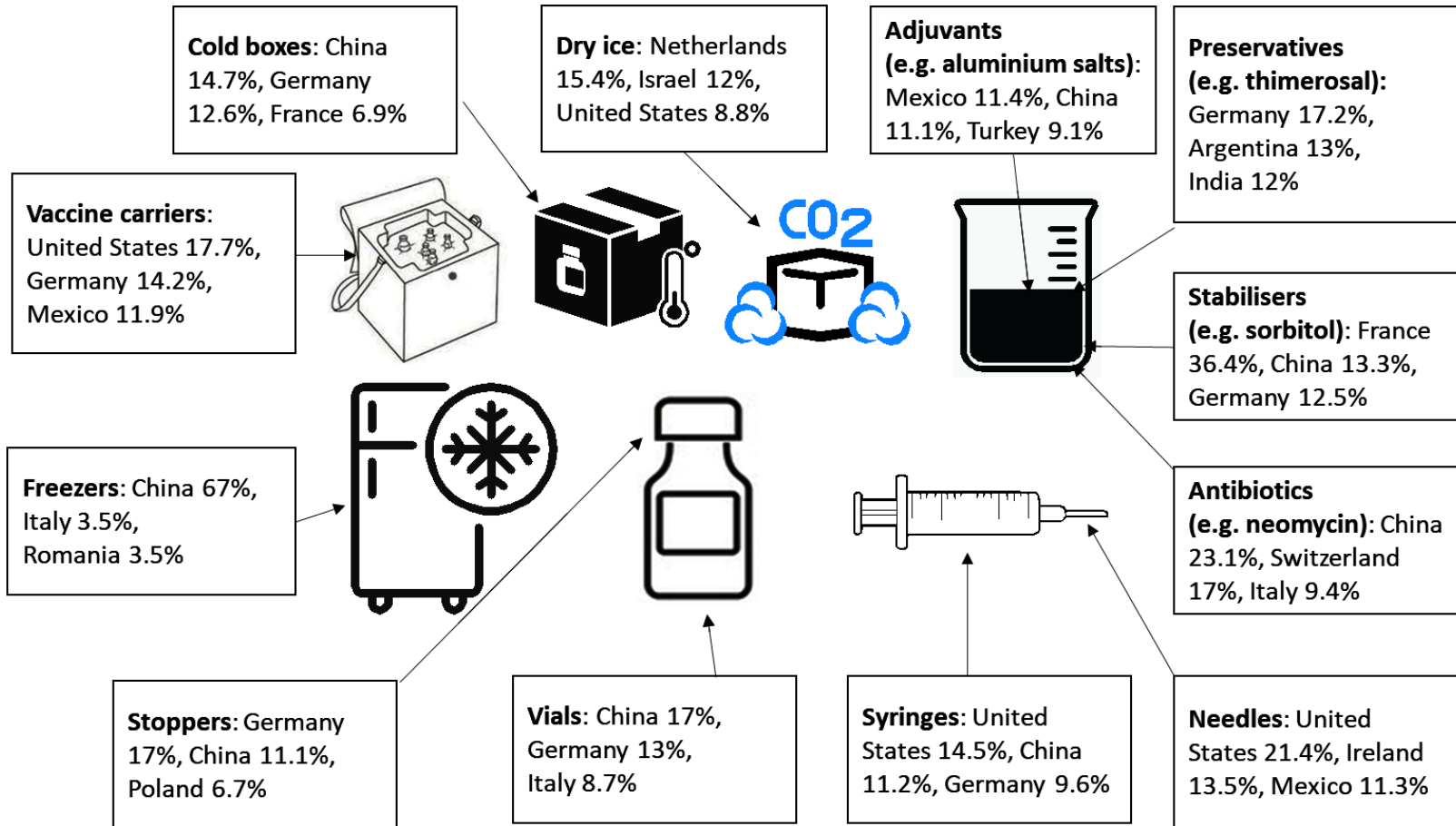
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Critical Components – Key Findings

- Global vaccine manufacturing requires timely access to hundreds of items produced by several manufacturers across dozens of countries.
- Components must be defined, identified, and managed for seasonal and pandemic influenza to ensure uninterrupted, timely, equitable vaccine supply.
- A well-coordinated global body with an inclusive governance structure could orchestrate a globally distributed supply chain to produce influenza vaccines.

Critical Components – Global Production



Distribution and Delivery – Key Findings

- Resources needed for distribution and delivery depend largely on vaccine characteristics, with implications for equity.
- Countries need access to a broad portfolio of vaccines to adopt those best suited for their populations and distribution infrastructure.
- Cold chain logistics and transport capacity are primary bottlenecks in vaccine distribution.
- Limited data on global vaccine distribution contributes to challenges in vaccine planning.

Thank you

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