RESPIRATORY VIRUS Summit

PANDEMIC PREPAREDNESS: WHERE SCIENCE AND POLICY MEET

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Expert panel views on preparedness

Dr. Aeron Hurt, *Roche, Switzerland*

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PANDEMIC PREPAREDNESS: WHERE SCIENCE AND POLICY MEET

Industry-wide views and a company perspective on future approaches to pandemic preparedness

Aeron Hurt, PhD
Principal Global Medical Science Director, Influenza and COVID-19

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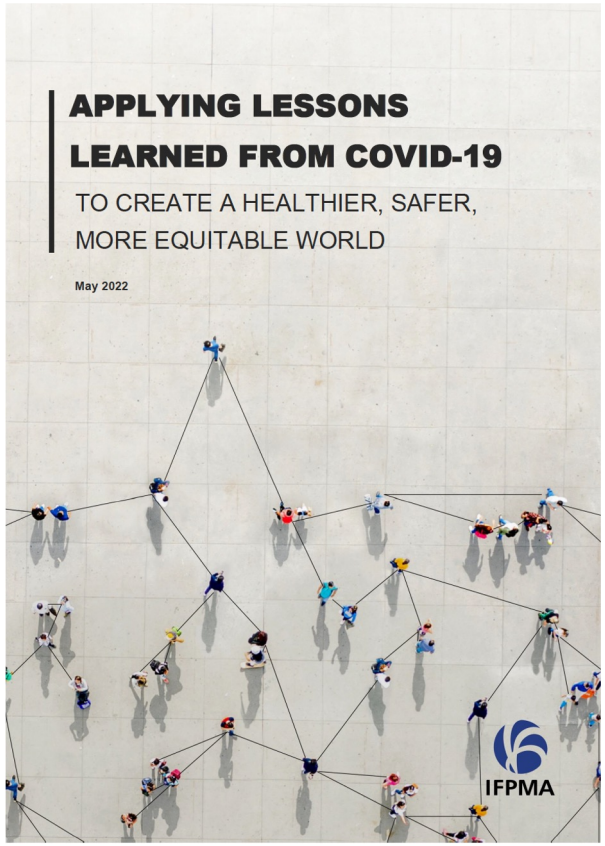
Industry wide insights into future pandemic preparedness



IFPMA report identifies ten insights from the biopharmaceutical industry presented as hard-learned lessons to date – and as urgent strategies to end the current pandemic and better prepare for the next one.

"Stopping the next pandemic, let alone in 100 days, isn't something that a single country or organization can do alone. Success will require advances in the organization, governance, and financing of global-preparedness systems and the development of multiple interconnected, scientifically guided collaborative efforts." (Saville et al. 2022)

https://www.ifpma.org/resource-centre/applying-lessons-learned-from-covid-19-to-create-a-healthier-safer-more-equitable-world/

Saville et al. Delivering Pandemic Vaccines in 100 Days — What Will It Take? NEJM March 2, 2022 DOI: 10.1056/NEJMp2202669

Applying lessons learned from COVID-19

1. Health Security Starts with Pathogen Surveillance and Sharing

- Improved and expanded pathogen and disease surveillance is essential
- It is hard to achieve the goal of protecting people if sharing of pathogens and their genetic information is delayed/constrained.

2. Partnerships Accelerate R&D and Manufacturing

- Effective partnerships accelerated R&D and manufacturing for COVID-19 vaccines and therapeutics.
- More than 330 partnerships – public-private, private-private, private-academic, and others – bolstered manufacturing capacity, facilitated technology and knowledge transfer, and drove historically rapid R&D.

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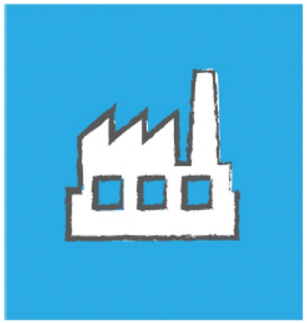
Applying lessons learned from COVID-19

3. Advance Market Commitments Support Manufacturing Scale-Up for Global Pandemic Response

- Advance market commitments for COVID-19 vaccines and therapeutics allowed for vital supplemental investments in production capacity and voluntary technology transfer.



4. Innovation Is Essential for Preparedness and Response

- Decades of investment in research and development laid the groundwork for the rapid development timelines for the mRNA and viral vector vaccines now in use to mitigate COVID-19 disease.

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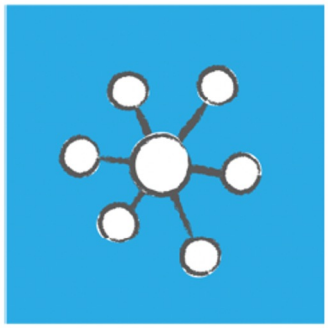
Applying lessons learned from COVID-19



5. Global Upstream Supply Chain Disruptions Put Production and Distribution at Risk

- The lack of multiple, globally sourced components delayed pharmaceutical distribution throughout the pandemic.
- Proposed investments to expand manufacturing capacity must also build capacity for sufficient and rapid supply of critical commodities and raw materials.

6. An Established Procurement Mechanism for Low-Income Countries Is Vital

- COVAX was unable to secure advance purchase agreements for doses on a par with high-income country purchasers.
- When a pandemic is declared, sufficient, dedicated, and sustainable financing must be available immediately to procure goods for countries with limited or no capacity to finance their own pandemic purchases.

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Applying lessons learned from COVID-19

7. Regulatory Agility and Convergence Guard Safety and Speed of Access

- Record development time was made possible by the extraordinary collaboration between industry and national and regional regulatory authorities.
- The promise of scientific advancements and technology to speed development, production, and access to vaccines and therapeutics will not be realized without this regulatory agility

8. Vaccine Nationalism Puts Everyone at Risk

- The first obligation of any government is to ensure the safety of its people. But narrow understandings of that duty led to the rise of "vaccine nationalism." Refining the concept of "national health security" in a global context will be essential before the next pandemic.

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Applying lessons learned from COVID-19

9. Delivery Infrastructure Must Be Strengthened

- The pandemic demonstrated the imperative of strengthening national health systems and ensuring universal health coverage for everyone, everywhere.
- All stakeholders – governments, civil society, manufacturers, and others – have a collective responsibility to ensure equitable access to vaccines and treatment
- Important to build the necessary infrastructure supporting countries' ability to deliver needed vaccines and medicines ahead of time.

10. Confidence in Vaccines and Therapeutics Is Critical for Success

- High public confidence in COVID-19 vaccines and therapeutics is needed
- Concerted, cross-sector action to build public trust is critical and will need to be maintained.

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Future approaches to pandemic preparedness in the influenza antiviral space

Background:

Existing influenza antivirals have broad activity so are expected to be active against a new pandemic influenza virus

- But manufacturing timelines mean that demand will exceed available supply in a pandemic situation, as such stockpiling is necessary.
- Antivirals will be the first line of defence for treating infected patients and, together with NPIs, will be needed to protect the most vulnerable prior to vaccines being available

Future approaches to pandemic preparedness in the influenza antiviral space

Future approaches:

- Commitment to provide stock to WHO via PIP framework, and to work with WHO and other NGOs on solutions for middle- and low-income countries.
- Partner with governments to find long-term, sustainable solutions to enhance local pandemic preparedness
- Integrated diagnostic/therapeutic/system infrastructure approaches
- Explore innovative approaches to stockpiling, including:
  - How to avoid stock wastage due to expiration by finding integrated solutions for seasonal & pandemic influenza
  - Alternative storage and management approaches

Doing now what patients need next