



READY2RESPOND

THE TURNING POINT:

PREPARE NOW TO RESPOND BETTER

Harnessing the Power of Influenza and COVID-19
Vaccination in Low- and Middle-Income Countries to Bolster
Adult Vaccination and Respond to the Next Pandemic.

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Publication Context

Ready2Respond is a unique global coalition of partners from the public, private and non-profit sectors committed to augmenting low- and middle-income countries' readiness to respond against influenza and emerging respiratory viral pandemic.

The content of this publication was originally intended to serve as an input to Ready2Respond's strategic reflections and is based on interviews with experts, secondary research and discussions with the Ready2Respond Secretariat and its advisors in early 2021. The goal of this publication is to share the content of this exercise more broadly with the wider field beyond Ready2Respond. Please see the appendix for more details on the project approach and methodology.



FOREWORD

Vaccine Innovation and Vaccine Access are the two sides of the same coin: To ignore one is to deny the potential of the other.

We live at a moment in history unprecedented with respect to both the advance of new technologies and the massive inflow of funding to speed up the successful development of a myriad of COVID-19 vaccines which ultimately should be able to help us control the second pandemic of the 21st century. However, as we release this report, the COVID-19 pandemic declared 21 months ago continues to run its course, in part due to vaccine access inequities which are slowing down global recovery. The current crisis is a stark reminder that pandemic threats evolve in their trajectory depending on how well countries are prepared to respond – meaning how quickly vaccinations can be developed and deployed to effectively reduce morbidity, mortality, and economic loss in every corner of the world.

As we look forward to the time when each nation will be in a state of reduced COVID-19 circulation, we must remind ourselves that influenza, whether seasonal or pandemic, remains a constant threat. There is no doubt that relaxing social restrictions, once necessary to reduce the transmission of COVID-19, will create an opportunity for human influenza viruses to surge again, presenting a catalogue of new risks for public health. Several epidemic scenarios could occur, the most concerning being a pandemic as severe as the 1918 influenza pandemic which killed, proportionally, more people than COVID-19.

Only 19% of lower-middle income countries have national influenza vaccination program, while 6% of influenza vaccine doses produced annually are distributed to countries with 50% of the world's population. These data illustrate the magnitude of the challenge ahead to build seasonal and pandemic vaccine capacity.

This report provides information on barriers preventing low- and middle-income countries' decision-makers and donors from investing in seasonal influenza vaccination programs. The report also points to opportunities that we can collaboratively embrace to break down these barriers.

We believe that this is the opportune time to harness the power of influenza vaccination readiness to prepare against the next pandemic. Seasonal influenza vaccination continues to offer the world, including low- and middle-income countries, a robust blueprint for pandemic preparedness. We also believe it is time to recognize that influenza is part of the global health security conversation and is resourced accordingly.

EXECUTIVE SUMMARY

Early 2021, Ready2Respond conducted an extensive mapping of the current landscape of organizations and agencies working on global seasonal and/or pandemic vaccine preparedness. Performed during the COVID-19 vaccination deployment efforts, this research identifies key areas which may have contributed to low- and middle-income countries (LMICs) not prioritizing seasonal influenza vaccination, or utilizing influenza vaccination programming as a blueprint for pandemic vaccine deployment preparedness despite a sustained WHO recommendation.¹ This report provides recommendations for shoring up readiness to future respiratory pandemics, while elevating influenza preparedness as a public health priority in LMICs.

KEY INSIGHTS

The case for investing in influenza vaccination programming is unclear at the country level.

The largest barrier to LMICs prioritizing influenza vaccination programming is the absence of a compelling investment case for the country. In LMICs, seasonal influenza has long been viewed as a disease with relevance predominantly in high-income countries. What is most needed is more data on the burden of influenza as well as context-specific data on economic vaccination benefits in middle and especially low-income countries, particularly for at-risk populations. In the absence of data required to inform the case for investment, LMIC governments continue to prioritize budget allocations for other diseases and services, and donors and other public health players follow suit.

Despite positive outcomes regarding new vaccine technologies, COVID-19 revealed significant gaps in vaccine programming which in turn has driven access and deployment inequities across geographies.

The timeliness of the distribution and administration of vaccines is essential to effectively halt the spread of pandemic diseases. Understandably, a significant inflow of financial resources has focused on COVID-19 vaccines, which were



developed at unprecedented speed. Vaccine availability and a slow and delayed COVID-19 vaccination rollout in LMICs has left them vulnerable to COVID-19 and provided an environment for the development of more infectious variants, new surges of the virus and a slower worldwide recovery out of this public health and economic crisis. As of December 8, 2021, only about 8.35% of people in low-income countries had received at least one dose of COVID-19 vaccines compared to 64.94% in high-income countries.²

In comparison to the 2009 H1N1 pandemic, the COVID-19 pandemic has more clearly and dramatically exposed the chronic lack of basic capabilities and national health system capacities necessary for rapid vaccine mitigation response, severely impacting countries' resilience. Countries that had developed adult influenza vaccination programs were generally better prepared for COVID-19 vaccination: according to documented feedback received from representatives of specific Partnership for Influenza Vaccine Introduction (PIVI) partner countries, public health professionals in Albania, Armenia, Bhutan, Laos, and Mongolia have gathered real-world evidence showing that existing influenza programs are currently reinforcing efficient COVID-19 responses. For instance, these early evaluations showed an easy adaption of influenza micro-plans and easy access to priority groups, experience with addressing legal and procurement barriers, use of influenza data management systems for reporting and evaluation, experience with influenza vaccine cold chain and vaccine delivery sites, and easier access to trained health care workers.³ This is a reminder that during the 2009 H1N1 pandemic, countries

with seasonal influenza vaccination programs had more effective pandemic responses than countries without such programs.^{4,5}

Seasonal influenza as a blueprint for pandemic preparedness is not clearly understood and has been challenged by COVID-19.

Many LMIC government decision-makers are not aware of, or do not fully appreciate, the extent to which a routine annual seasonal influenza vaccination program offers a ready-made vaccine deployment infrastructure which would enhance their preparedness to respond to highly disruptive public health emergencies such as the 2009 H1N1 and the COVID-19 pandemics. Facing competing health priorities, the lack of burden of disease or cost effectiveness data, and limited

domestic financial support, these countries hesitate to invest, or decide to not invest, in a routine influenza vaccination infrastructure, further limiting the ability to import, distribute and administer influenza pandemic vaccines when these are available.

The effect of COVID-19 and the ever-looming risk of a pandemic influenza highlight the need for all countries to prioritize investments in global health security (GHS), from creating early warning and adequate surveillance systems to building and sustaining vaccine access and deployment capabilities to stop infectious diseases threats as quickly as possible. In our research, experts from the seasonal influenza space clearly saw the linkages and synergies between seasonal and pandemic influenza preparedness, while some experts in the GHS space, expressed skepticism and challenged the relationship between the two.

MOVING FORWARD WITH ACTIONABLE OPPORTUNITIES

The research sheds light on new opportunities for Ready2Respond and its partners on how to strengthen readiness for future respiratory pandemics, while elevating influenza preparedness as a public health priority in low- and middle-income countries.

Actionable opportunities are:



Invest in building the burden of disease and economic case for influenza readiness.



Develop coalitions at country and/or regional level to lower barriers to vaccine access.



Adopt seasonal influenza and COVID-19 endemic vaccination to improve preparedness with adult vaccination

Ready2Respond will use these findings to expand its collaborative efforts across the wider health systems strengthening agenda, and the broader global health security community.

BACKGROUND

The largest epidemics in the last two centuries were caused by airborne respiratory pathogens, influenza viruses and coronaviruses.

While the pandemics of the 20th century were due to the emergence of a new influenza A strain, normally causing seasonal infections, the COVID-19 pandemic also emerged from a new coronavirus in the same phylogenetic group responsible for previous regional outbreaks, including SARS and MERS.⁶

Environmental changes related to deforestation, urbanization, mass gatherings, increased population mobility, and the ability to spread efficiently between humans, make emerging airborne zoonotic pathogens the most likely candidates to cause a pandemic.⁷ In addition, in our tightly interconnected world, it may only take a few days for an airborne pathogen to spread around the globe – a real threat when most of the world remains underprepared to detect and respond to a public health emergency.⁸

Each year, influenza is responsible for the deaths of 290,000 to 650,000 people, and it is known to be a major contributor to the reduction in quality of life due to secondary infections.⁹

The highest risk of severe influenza disease, including hospitalizations and deaths, are among the elderly, very young children, pregnant women, and patients living with certain underlying chronic conditions.^{10,11,12} Many sub-populations globally – including in LMICs – develop underlying conditions and poor health because of systematic exclusion and social inequality. Increased risk of influenza-related complications further exacerbates these inequities. For instance, in Africa, every week around 5,000 young women aged 15–24 years become infected with HIV,¹³ and people living with HIV are at a higher risk of developing serious influenza-related complications.¹⁴

Beyond health-related consequences, seasonal influenza has economic impacts. These are related to both direct and indirect costs, including increased medical care costs as well as productivity losses due to school and work absenteeism.^{15,16} This challenge extends to national healthcare systems. In 2009, the influenza pandemic is estimated to have driven an 800% increase in absenteeism in the Chilean healthcare workforce.¹⁷ It is important to note that this burden is also



more heavily weighted upon women, who make up 63.5% of health and social care workers in Asia and Pacific region and 74% in the Americas.¹⁸

Influenza pandemics have killed, and will again kill, millions of people. It's estimated that the influenza pandemic of 1918 infected one-third of the world's population and led to about 50 million deaths before it subsided in 1920. One million people died in the 1957 influenza pandemic, and between one and three million died because of the 1968 pandemic. In 2003 A(H5N1), or so-called Avian Influenza, highlighted how a novel virus could pass from animals to humans putting the world on high alert. The 2009 A(H1N1) pandemic spread to over 214 countries and territories or communities, resulting in tens of millions of cases and an estimated 151,700 to 575,400 deaths in just the first year.

COVID-19 has been a stark reminder of the dangers of viral pandemics. As of December 14, 2021, COVID-19 has killed more than 5.3 million people and infected more than 271 million people in 221 countries and territories.

Like influenza, COVID-19 disproportionately results in serious disease and death in adults. As a result, the World Health Organization (WHO) has initially prioritized adult groups, including healthcare workers, adults with chronic medical conditions and older adults—for COVID-19 vaccine receipt and the COVID-19 pandemic vaccine response is reliant on adult vaccination infrastructure. Among the adult immunization programs, seasonal influenza is seen as the most widely implemented with 58% of the 194 WHO

member states reporting to have a national seasonal influenza vaccination program.¹⁹ Yet unfortunately 60% of the world's population live in countries no routine adult influenza immunization programs, with weak influenza immunization programs, and/or with limited access to seasonal influenza vaccines.²⁰

While vaccination is the most efficient intervention to prevent seasonal influenza and mitigate an influenza pandemic, many LMICs do not have annual influenza vaccine programs in-place.

Vaccines are the most efficient intervention to manage seasonal influenza, preventing infection and severe illness. Reducing the risks of seasonal influenza through vaccination could offer significantly improved health outcomes for all. The WHO underscores that vaccination is especially important for people at high risk of influenza complications, and recommends vaccination for pregnant women, young children, elderly individuals, individuals with chronic medical conditions, such as HIV, and health-care workers.²¹ Given that influenza viruses are constantly evolving and that the current vaccines are strain-based, they rarely provide protection beyond one year, and individuals are recommended to be vaccinated annually.²²



While annual influenza immunization programs have been conducted in most high-income countries for decades and influenza vaccine use has been increasing globally, LMICs are underrepresented in this area. In 2018, 59% of countries worldwide reported having an adult influenza vaccine program. However, only 19% of low- and lower-middle income Countries, reported adult influenza vaccine programs, while 75% of Upper-middle and 98% of high-income countries reported adult influenza vaccine programs.²³ There are

also major disparities in the distribution of vaccines and, by extension, the use of vaccines. In 2019, over 525 million doses of seasonal vaccine were distributed globally by members of the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA). 50% of the global population (i.e., residents of countries in the WHO Eastern Mediterranean Region, South-East Asia Region and African Region) received only 6% of distributed vaccines.²⁴

Sustained seasonal influenza vaccination programming has long been seen as a blueprint for influenza pandemic preparedness. However, without routine annual programs in-place, preparedness for pandemic vaccination response is weak.

In addition to reducing the deaths and serious disease impacts of seasonal influenza, WHO considers that strong national capacities for preparedness and response against influenza are essential and has encouraged the development of seasonal influenza vaccination programs to improve influenza pandemic preparedness.^{25,26}

Influenza programs can offer a basis to strengthen health systems and enhance preparedness capacities, including: conducting surveillance with an understanding of severity for respiratory disease; gathering data on disease and economic burden linked to prevention programs; building influenza vaccine manufacturing capacity that could switch to pandemic influenza vaccine production in the event of a pandemic outbreak; developing systems and infrastructure and training health care workers for the deployment and use of vaccines; and establishing national influenza pandemic preparedness and response plans to support pandemic readiness.^{27,28,29} Responses to the 2009 H1N1 pandemic suggest that countries with a seasonal influenza vaccine program were better able to receive and use donated vaccines than those without an existing program.³⁰

Despite the many lessons learned, countries around the world continue to be underprepared for the next influenza pandemic. In 2018, the WHO Global Influenza Programme surveyed Member States to understand the current level of pandemic preparedness for pandemic influenza and to identify key action areas. This consultation revealed important weaknesses in pandemic influenza preparedness for all countries, with lower-income countries facing the most important gaps.³¹ The fallout of this lack of preparedness has been exposed by the COVID-19 global health crisis.

KEY INSIGHTS ON BARRIERS TO ADOPTION

Between February – April 2021, Ready2Respond conducted a landscape mapping exercise. Interviews and consultations were conducted with experts bringing complementary cross-sectoral perspectives (public and private) in seasonal influenza, pandemic preparedness, and global health security.

To harness the untapped potential of seasonal influenza programming in LMICs while taking stock of lessons learned from the unfolding COVID-19 pandemic, the study aimed to explore more deeply the barriers to influenza vaccination programming adoption.

Vaccines to mitigate large epidemics and pandemics need to be developed rapidly and produced at scale, priced affordably, allocated globally so that they are available where needed, and widely deployed in local communities. The seasonal influenza value chain is comprised of up-, mid- and down-stream activities, all of which contribute to pandemic preparedness.

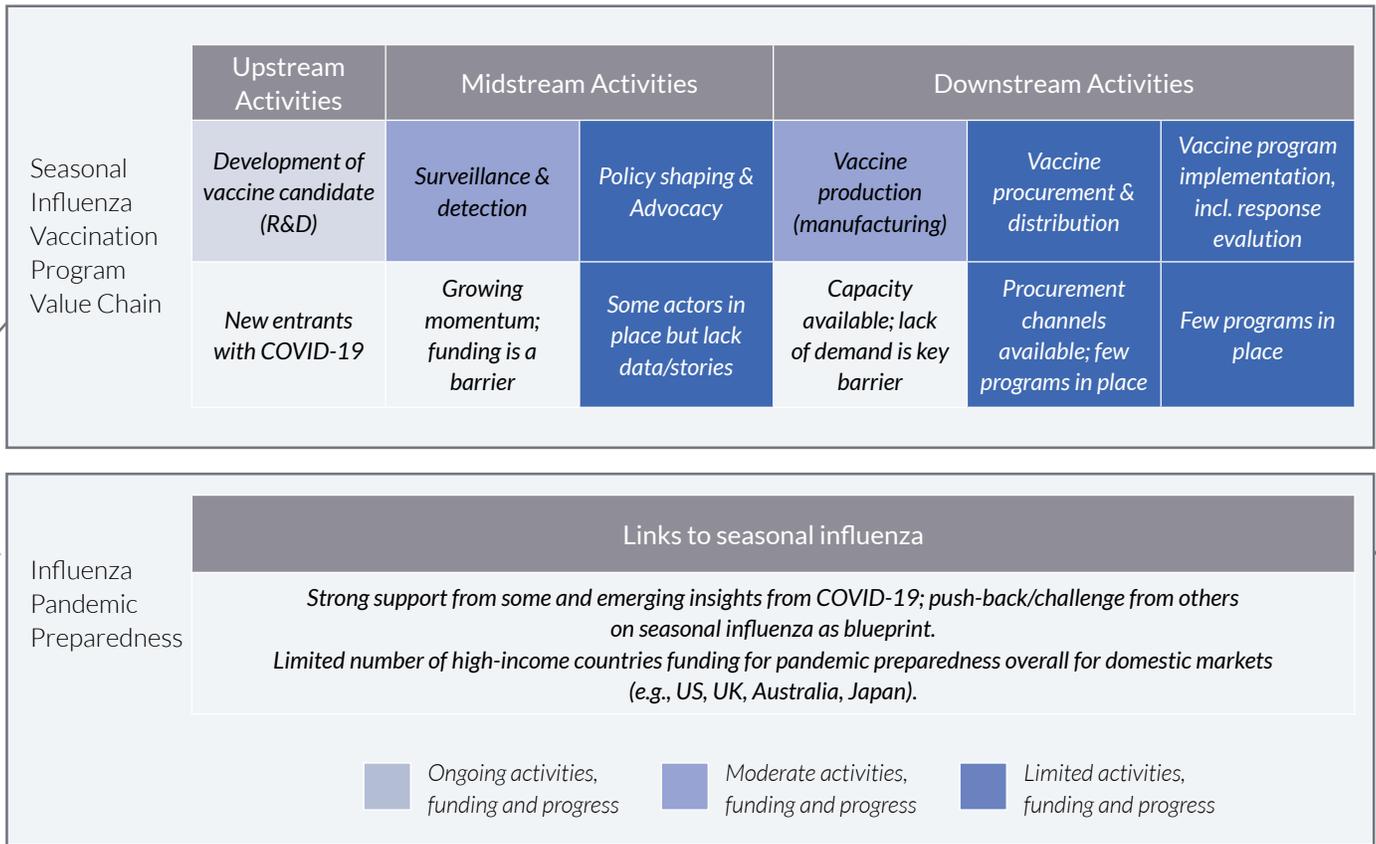
Upstream, there is considerable R&D activity from the private sector and funders, fueled by COVID-19. Possibilities in e-technological improvements have been accelerated by COVID-19, and could change the game for seasonal influenza, improving the efficacy, simplifying administration, and potentially reducing the frequency of administration as a result. However, it is still unclear if the COVID-19-related activity will translate into sustained investments into improved influenza vaccines.³² An Influenza Vaccine Roadmap for Research and Development has been released, representing inputs from a broad range of partners. This roadmap may accelerate next generation influenza vaccine development by providing a coordinating structure for investment. The Global Funders Consortium for Universal Influenza Vaccine Development has been established as a mechanism to increase attention among funders to key scientific gaps and opportunities among funders.³³

Midstream, we observe growing levels of investment/funding for surveillance in LMIC hot spots, driven by COVID-19. WHO and US Government are the main funding actors for generating data. However, there is a systemic lack of



‘quality’ burden of disease data around influenza in many LMICs, which sits on the critical path towards seasonal influenza prioritization. In addition, there is a historical lack of involvement from large immunization players such as Gavi, given lack of donors’ interest and lack of traction among countries’ governments.

Based on our research, for seasonal influenza vaccination programming and related pandemic influenza preparedness, downstream activities and actors are limited in many LMICs. The following heat map indicates the domains where there is the least activity and investment, namely in policy shaping and advocacy for investing in seasonal influenza programming, which drives limited procurement and program implementation. Consequently, influenza pandemic preparedness - which crosscuts across all dimensions of the value chain – is also a major gap.



Three key insights generated through our research may help to shed light on the root causes behind these challenges:

INSIGHT 1: AN UNCLEAR CASE FOR INVESTMENT

Ministries of Health around the world are tasked with delivering the best health outcomes for their populations within their limited budgets. When considering where and how to adapt policy, drive reform and allocate resource, policymakers and key decision-makers must have strong investment cases.

Unlike for many high-income countries (HICs), making the case for investing in seasonal influenza vaccination programming to-date has been problematic in many LMICs. Challenges lie in fully understanding the extent to which seasonal influenza is a public health issue as well as in the vaccine's effectiveness.

What is the size of the problem?

In many LMICs, burden of disease data is often limited or unavailable. Perceptions of seasonal influenza as less problematic than other diseases continue to go unchallenged, and advocates, civil society, and policy-shapers – including WHO regional offices – are not sufficiently equipped with the data required to raise awareness of the problem, let alone drive resource allocations. Without adequate data on the burden of disease and the economic knock down effects seasonal influenza has on lower income countries' populations (e.g., loss of productivity linked to absenteeism), seasonal influenza continues to remain outside of governments and donors' priorities.

INSIGHT 1:

AN UNCLEAR CASE FOR INVESTMENT (CONT.)

More data is being generated because of increased LMIC surveillance capacity built to track COVID-19 variants. Several actors support surveillance at global and regional levels, including regional surveillance networks (e.g., Southeast European Centre for Surveillance and Control of Infectious Diseases – SECID). However, the lack of comprehensive data (both epidemiologic and economic) continues to be the biggest barrier to seasonal influenza prioritization, with regional disparities including in surveillance systems and access to quality data. This is particularly the case in Southeast Asia and Africa. To enable informed decision-making amongst policymakers across ministries (including Ministries of Finance), burden of disease data and related economic data on impacts of seasonal influenza are required.^{34,35} World Health Organization has directed resources from the Pandemic Influenza Preparedness Framework to support collection of disease burden data and will be an important source of support for this area.



How effective are the available solutions?

Some vaccines, such as the ones against polio and measles, provide protection for upward of 10 years.³⁶ In the case of seasonal influenza vaccine, annual vaccination is recommended as protection declines over time and because the virus is constantly changing and vaccine-derived immunity wanes over time. Furthermore, the effectiveness can vary based on individual patient characteristics such as age, and how well matched the vaccine is with the variant.³⁷ Committing to an annual investment in a technology that has variable efficacy is a challenge for decision-makers, even when the burden of disease for seasonal influenza is better understood. Substantial research and development projects are underway towards developing influenza vaccines that can provide more durable and reliable effectiveness, but most remain in early stages of development.

A limited vaccine effectiveness combined with lack of burden of disease data in their country, translate in an investment challenge for LMICs' Ministries of Health who are unable to prioritize seasonal influenza. The same holds true for several multilateral organizations and

bilateral donors. Amongst HICs, the U.S. government is a major funder in burden of disease assessment as well as in vaccine innovation and vaccine effectiveness research. However, limited additional support is forthcoming from other high-income governments beyond domestic investments in seasonal influenza programming (e.g., UK, Australia, Japan). For instance, despite being the leading public-private global health partnership with the goal of increasing access to immunization in poor countries, Gavi, the Vaccine Alliance, does not currently support seasonal influenza in its strategy.

INSIGHT 2:

LIMITED VACCINE PROGRAMMING AND ACCESS

As a result of being a lesser priority for many LMICs, few countries have seasonal influenza vaccine programs in place. Even for those that do, the ability to maintain annual commitments is a challenge, which in turn drives challenges in vaccine supply and distribution.

Vaccine program implementation: What are the challenges LMICs face?

While some LMIC regions, such as Eastern Europe and Latin America, have established vaccination policies and programs, the majority do not. Countries that are interested in deploying seasonal influenza vaccine programs face several challenges. Vaccines are considered expensive, no matter what their efficacy rate. Also, as countries have limited resources and capacities, for instance regarding the number of health care workers able to administer the vaccine and the cold chain, deploying seasonal influenza vaccine programs could be seen as presenting the risk to overburden systems which are already weak.

Beyond financial and capacity constraints, LMICs face challenges to reach adult populations. Currently, there are limited mechanisms that have been adopted to get to these populations beyond healthcare systems. Targeting new sub-populations requires new strategies, including new policies and different outreach approaches. This includes building trust and buy-in amongst key influencers in the community, including community health workers, medical associations, academics, news media, civil society organisations, and community leaders (both civil and religious).

Why is sustained demand key to vaccine access?

One of the challenges for LMICs in securing enough vaccine is a limited ability to forecast influenza vaccine demand. In 2020, UNICEF issued a Seasonal Influenza Vaccine Supply Update which underscored inconsistent and sometime unreliable forecasts provided by low-and middle-income countries for influenza vaccine procurement.³⁸

Due to tight production timelines, if any country's demand is not forecast or included early in vaccine manufacturers' plans, manufacturers are unable to meet demand identified on short notice. Most manufacturers plan their production 18 months in advance since some ingredients and containers (vials, stoppers, syringes, plungers) have a long lead time to be sourced at a reasonable price.

Additionally, demand-related difficulties vary across regions and countries for seasonal influenza vaccines. Pooled procurement mechanisms could offer an approach to pooled procurement, particularly for smaller countries, for instance in Eastern Europe, that face difficulties in accessing vaccines. Pan American Health Organization (PAHO)'s Revolving Fund is seen as a gold standard, with established relationships with vaccine manufacturers. This cooperation mechanism for the joint procurement of vaccines, syringes, and related supplies for countries and territories in the Latin America and Caribbean region has been active for more than 40 years.³⁹

LMICs currently have limited seasonal influenza vaccine manufacturing capacities though there is a growing appetite for this to change. The African Union (AU), for instance, recently announced an agreement with the Coalition for Epidemic Preparedness Innovations (CEPI) to strengthen African vaccine research and development, and manufacturing.⁴⁰ However, without a sustained seasonal demand, the case for additional local LMIC manufacturing capacity for influenza vaccines is unclear.

INSIGHT 3:

LOW AWARENESS OF THE RELEVANCE FOR PANDEMIC PREPAREDNESS

Many of the capabilities required for deploying a seasonal influenza vaccine program have been shown to bolster influenza pandemic influenza (and other respiratory disease) preparedness, such as experience in conducting vaccine campaigns in non-pediatric populations, mobilizing financial resources and personnel for vaccine deployment, ensuring sufficient cold chain capacities, and achieving high rates of vaccine uptake amongst target groups. Conversely, countries that do not have these capabilities struggle to respond as effectively.^{41,42}

Seasonal influenza vaccination programming as a blueprint for preparedness: Who is supportive?

The pandemic influenza community recognizes national seasonal influenza vaccination programming as a blueprint for influenza pandemic preparedness, whilst acknowledging that annual seasonal programming alone is not enough to respond in pandemic contexts (e.g., planning for pandemic vaccine surge capacity, stockpiling of drugs and vaccines). Our research found that some experts agree, based in part by their real-time experiences during the COVID-19 response. Anecdotal reports include health departments in low-resource settings in Africa using the seasonal influenza guidelines to assist teams to prioritize vaccination rollouts to the most vulnerable populations at-risk of severe disease, including healthcare workers (largely female), pregnant women, and people living with HIV. In parallel, recent pandemic preparedness reports (e.g., World Bank¹) are beginning to discuss seasonal influenza as a blueprint for handling pandemics.

Seasonal influenza vaccination programming as a blueprint for preparedness: Who is yet to be convinced?

However, low-levels of awareness – and even scepticism – remain. COVID-19 has exposed the limitations of existing tools for assessing preparedness (e.g., Global Health Security Index – GHS Index, Joint External Evaluation – JEE), which are now under review. In our research, experts in the global health security field were often not aware of how seasonal influenza programming could benefit preparedness overall, or in the context of pandemic influenza specifically. Philanthropic funders supporting pandemic preparedness (e.g., the Skoll Foundation; the Rockefeller Foundation; the Bill & Melinda Gates Foundation) do not yet have a focus on seasonal influenza vaccines. Many argue that it is not yet apparent that countries with seasonal influenza programming have responded to COVID-19 better; additionally, they note that other epidemics (e.g., Ebola, Zika) have already enabled pandemic preparedness capacities.

More evidence, data, and efforts to raise awareness and understanding of the link between seasonal influenza vaccination programming and pandemic preparedness for respiratory pandemics, as well as non-respiratory pandemics are required. It will be critically important to test the extent to which this blueprint hypothesis holds true to the context of COVID-19 as this will inform and shape forthcoming conversations for preparing for the next pandemic.

OPPORTUNITIES FOR OVERCOMING BARRIERS

Based on insights captured during this research, we identified opportunities to consider as we must prepare now for what could unfold from the COVID-19 pandemic. Experts believe that two critical uncertainties will likely shape the short-term future of influenza vaccination programming.

- The evolution of COVID-19 disease (endemic, like influenza or under control like SARS- 2003) and its implications on influenza readiness.
- The prioritization of pandemic preparedness by governments (improved or returned to complacency).

Considering a future environment where COVID-19 and influenza threats will co-exist, it is imperative to place a greater focus and commitment on reaching the goal of ‘One World with Sustained Preparedness.’ Through the research, three opportunities emerged which the influenza community must move forward:

Opportunity 1: Build the case for investing in influenza vaccination readiness.

For LMIC policymakers to prioritize investing in seasonal influenza vaccination programming, it will be critical for advocates to continue to:

- Invest in building the burden of disease and economic case as a matter of priority to unlock additional resources for seasonal influenza and pandemic preparedness.
- Explore if new technologies that emerged from COVID-19 (e.g., mRNA, cell-based platforms) might improve seasonal influenza vaccine efficacy and strengthen the investment case.
- Actively engage donors in the immunization and global health space to prioritize investment on influenza vaccination programs.

Opportunity 2: Develop coalitions at country and/or regional level to lower vaccine access barriers.

Continuing to build the awareness, capacity and networks of regional and national experts and key stakeholders will be vital to unlock the “downstream” challenges to seasonal influenza programming. Advocates and field-builders are encouraged to continue to shift from global level dialogue to cultivating LMIC capacity on a region-by-region basis to:

- Enable exchange and learning between regions and within regions and create a public-private community of experts and policy-shapers.
- Determine most fit-for-purpose vaccine usage strategies (e.g., at-risk groups and health care workers as a first step), learning from COVID-19 regional response.
- For vaccine procurement, explore a regional approach, adaptable to local needs.

Opportunity 3: Adopt seasonal influenza and COVID-19 endemic vaccination readiness to improve preparedness with adult vaccination.

While political momentum and energy is quite rightly focused on the COVID-19 response, increased attention is being paid to learning the hard lessons required for future preparedness. To elevate the promise seasonal influenza vaccine programming offers as a blueprint for pandemic preparedness, advocates must:

- Develop a stronger narrative and evidence-based linking and COVID-19 programming with adult vaccination and respiratory pandemic preparedness.
- Elevate the role of seasonal influenza programming in COVID-19 response “hot topic” discussions, including surveillance, local manufacturing, and procurement.
- Raise the profile of pandemic influenza in broader global health security circles.

CONCLUSION

Ready2Respond and its partners from the public, private, philanthropic, and academic sectors will use the findings from this research to expand and deepen their collaborative efforts. The work will span disease areas relevant for influenza and other respiratory pandemics in LMICs, the broader health systems strengthening agenda and the wider global health security community.

This is an ambitious agenda which will pave the way to enabling improved health outcomes for all, while preparing to respond to the potentially devastating effects of the next pandemic.



METHODOLOGY AND CONTRIBUTORS

OBJECTIVES

[Ready2Respond](#) is a coalition bringing together organizations from the public, private and non-profit sectors active in the immunization field, whose mission is to assure the world's readiness to respond to the next pandemic through transformative change in vaccine access and immunization policy, with a focus on supporting low- and middle-income countries (LMICs).

To ensure Ready2Respond's efforts build upon all existing efforts and deliver maximum value-add to the agenda, the Ready2Respond secretariat sought to conduct a landscape assessment and actor mapping of existing activities, actors and supports of seasonal influenza vaccination programming in low- and middle-income countries.

Ready2Respond, with the support of the [Wellcome Trust](#), mandated [FSG](#), the social impact advisory firm to perform this study. This "point-in-time" assessment conducted between February 2021 and April 2021 sought to identify key actors and influencers; understand program, policy, technical and funding gaps; pinpoint efficiencies and resiliencies; and sense the shifts and changes underway because of COVID-19.

METHODOLOGY

The project was conducted between February and April 2021 and included first and secondary research activities. Interviews and consultations were conducted with experts bringing complementary cross-sectoral perspectives (public and private) in seasonal influenza and pandemic preparedness across global, regional, and local levels. In parallel, desk research was performed, including organisational reports and select peer-reviewed literature.

This report is based on

- A mapping of ~65 organizations active in the seasonal influenza and pandemic preparedness space.
- A series of deep interviews of ~25 global, regional, and local stakeholders covering the seasonal influenza value chain, areas of overlap with pandemic preparedness and global health security.

CONTRIBUTORS

Ready2Respond is grateful to the following organizations who have contributed to this Insight Report through exchanges in person, via phone or other collaborations. Some may differ with aspects of it or have stressed other matters of primary focus. All have contributed with the greatest sense of shared purpose at this time of international need.

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Georgetown University, United States
Global Alliance for Vaccines and Immunization (GAVI)
Institut National d'Hygiène Publique (INHP), Côte d'Ivoire
Institute of Public Health, Albania
International Federation of Pharmaceutical (IFPMA)
Johns Hopkins Bloomberg School of Public Health
Makerere University School of Public Health, Uganda
Minister of Health, Singapore / National University Singapore
Resolve to Save Lives
The Vaccines For Africa Initiative and University of Cape Town, South Africa
United Nations International Children's Emergency Fund (UNICEF)
United Nations Office for Project Services (UNOPS)
United States Department of Health and Human Services (HHS)
World Bank (WB)
World Health Organization (WHO)

ABOUT

READY2RESPOND

Ready2Respond is a unique global coalition of partners from the public, private and non-profit sectors committed to augmenting low- and middle-income countries' readiness to respond against influenza and emerging respiratory viral pandemic. Our Mission is to assure the world's readiness to respond to the next pandemic through transformative change in vaccine access and immunization policy in low- and middle-income countries. Ready2Respond is an initiative hosted at The Task Force for Global Health.

Ready2Respond and its partners provide expert technical assistance to decision makers in low- and middle-income countries to design and execute projects aimed at reducing obstacles in building sustainable vaccination programs, allowing countries to create effective vaccination programs against future seasonal influenza epidemics, as well as influenza and other viral respiratory pandemics.

www.ready2respond.org



FSG is a mission-driven consulting firm supporting leaders in creating large-scale, lasting social change. Through strategy, evaluation, and research we help many types of actors—individually and collectively—make progress against the world's toughest problems.

Our teams work across all sectors by partnering with leading foundations, businesses, nonprofits, and governments in every region of the globe. We seek to reimagine social change by identifying ways to maximize the impact of existing resources, amplifying the work of others to help advance knowledge and practice, and inspiring change agents around the world to achieve greater impact.

As part of our non-profit mission, FSG also directly supports learning communities, such as the Collective Impact Forum, the Shared Value Initiative, and the Impact Hiring Initiative to provide the tools and relationships that change agents need to be successful.

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Wellcome supports science to solve the urgent health challenges facing everyone. We support discovery research into life, health, and wellbeing, and we're taking on three worldwide health challenges: mental health, infectious diseases, and climate.

Wellcome is a politically and financially independent global charitable foundation, funded by a £29.1 billion investment portfolio.

Our strategy includes grant funding, advocacy campaigns and partnerships to find solutions for today's urgent health challenges. Our founder, Sir Henry Wellcome, was a pharmaceutical entrepreneur. Our governance is based on an updated version of his will, in which he left us his wealth, his collection of historical medical items, and our mission to improve health through research.

www.wellcome.org

ENDNOTES

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