Immunisation and global health security: financing the future of pandemic prevention, preparedness and response

JULY 2026 POLICY BRIEF

Contents

This policy brief was developed with support from the Australian National Centre for Immunisation Research and Surveillance (NCIRS), and in consultation with multiple national, regional and global experts on pandemic prevention, preparedness and response.

Cover image: Ebola vaccination, Democratic Republic of the Congo, 2019
Credit: Gavi/2019/Frédérique Tissandier

Acronyms

AVMA	African Vaccine Manufacturing Accelerator
CFM	Coordinating Financial Mechanism
DZF	Gavi's Day Zero Financing Facility for Pandemics
FRF	First Response Fund
Gavi	Gavi, the Vaccine Alliance
IHR	International Health Regulations
iMCM-Net	Interim Medical Countermeasures Network
LMICs	low- and middle-income countries
MCM	medical countermeasures
MDB	multilateral development bank
PABS	Pathogen Access and Benefit Sharing
PPE	personal protective equipment
PPPR	pandemic prevention, preparedness and response
PHEIC	Public Health Emergency of International Concern
WHO	World Health Organization

Executive summary

Pandemic prevention, preparedness and response (PPPR) is an urgent global priority, yet investment remains insufficient, fragmented and insufficiently coordinated. The COVID-19 pandemic exposed critical weaknesses in the global system, contributing to avoidable morbidity, mortality and economic losses.

Immunisation is a first line of defence for PPPR

At the same time, the evidence is unequivocal: early, sustained investment in preparedness – including in immunisation – delivers substantial health and economic returns. Strong and equitable immunisation services, as part of resilient health systems, are therefore foundational to PPPR, acting as a first line of defence against outbreaks while providing a delivery platform for rapid vaccine response.

Financing PPPR more effectively

Despite progress made in the aftermath of recent public health emergencies, the PPPR financing landscape remains fragmented and underfunded. Key gaps include insufficient coordination, inadequate levels of preparedness financing, limited surge financing capacity and a 'missing middle' that would bridge rapid early response funding and large-scale response capital. Surge financing is particularly critical because the first days and weeks of an emergency often determine whether an outbreak can be contained or escalates into a wider crisis. Yet current financing arrangements are not consistently designed to release funding quickly – at sufficient scale and under conditions of uncertainty – when countries and partners need to procure vaccines and other medical countermeasures (MCM), support delivery and sustain essential services. Finally, there is limited risk tolerance and fragmentation across institutions.

Gavi's recent reform programme, the **Gavi Leap**, is designed to respond to this fragmented landscape by putting country ownership, long-term sustainability and country-led decision-making at the centre of Gavi's support to countries. By aligning support with national priorities and strengthening domestic systems, the Leap approach can help ensure that PPPR investments are better coordinated at country level, and foster resilience.

Gavi's 2026–2030 strategy (Gavi 6.0) is designed to address PPPR gaps through health system strengthening, investments in sustainable regional manufacturing capacity, market shaping and rapid financing mechanisms, such as the Day Zero Financing Facility for Pandemics (DZF) and its First Response Fund (FRF). These mechanisms help make funding available before all uncertainties are resolved, enabling faster procurement, allocation and delivery at the onset of a public health emergency.

Policy priorities and recommendations

Based on Gavi's experience and analysis, the following policy priorities and recommendations are intended to guide Member States, intergovernmental organisations, multilateral development banks (MDBs) and global health organisations as they shape the future global health architecture and engage in multilateral negotiations.

1. Invest in immunisation to build robust PPPR foundations

Immunisation programmes that are strong, equitable, resilient and integrated into primary health care are better equipped to respond effectively during emergencies.

Recommendations

- Increase investment in strong and equitable national immunisation programmes as a core component of primary health care to advance Universal Health Coverage and strengthen global health security.
- Support pooled procurement, and well-funded and replenished global vaccine stockpiles; and maintain rapid response funding for allocation and delivery during public health emergencies.

2. Strengthen PPPR capacities through domestic financing and aligning with national priorities

In line with the Gavi Leap principles,[1] external financing should reinforce country ownership by aligning with national plans; giving countries greater agency over how resources are deployed; and supporting co-financing approaches that facilitate countries to move towards self-reliance.

Recommendations

- Strengthen core PPPR capacities at national level through sustained investment in surveillance systems, including community- and facility-based detection for timely notification of public health events; laboratory capacity, including staff training and deployment of rapid tests; and human resources for health, including surge deployment.
- Embed PPPR priorities within national planning and budgeting processes, including through closer collaboration between ministries of health and finance; and increase domestic resource mobilisation, and alignment of external financing with national priorities.

3. Improve equitable access to medical countermeasures (MCM), including vaccines

COVID-19 and other recent health emergencies, including mpox, showed that inequitable access to vaccines, diagnostics, therapeutics and other MCM can delay outbreak control, and deepen health and economic impacts, particularly in low- and middle-income countries (LMICs). The adoption of the Pandemic Agreement, the ongoing Pathogen Access and Benefit Sharing (PABS) Annex negotiations and interim mechanisms such as the Interim Medical Countermeasures Network (iMCM-Net) reflect growing recognition that equity must be at the centre of PPPR.

Recommendations

- Support a strong, inclusive and effective PABS system to translate equity aspirations on access and benefit-sharing into binding commitments.
- Support long-term investments that strengthen local and regional manufacturing capacity, ensuring that all regions can rapidly produce vaccines and essential supplies during a crisis.

4. Build a faster, scalable and better-connected PPPR financing architecture

Outbreaks, epidemics and pandemics require predictable, scalable financing that can be released quickly through clear, pre-agreed triggers. Surge financing is particularly important because it gives countries and partners the liquidity needed to act early to contain the public health emergency, even before uncertainties are resolved. This requires financing mechanisms that are not only rapid, but also risk-tolerant and able to operate at sufficient scale.

While significant progress has been made through existing preparedness and response financing instruments, current arrangements remain fragmented and are not designed to sustainably finance PPPR as a global public good. There is therefore a need to explore new financing approaches, including innovative risk-sharing mechanisms, that can mobilise resources at the scale and speed required. In this context, multilateral development banks (MDBs) should play a stronger role by adapting approval processes, mobilising at-risk financing in the earliest stages

of an outbreak and providing larger-scale support as countries transition from emergency response to recovery.

Recommendations

- Scale up and better connect existing PPPR financing mechanisms by combining rapid at-risk financing, MDB financing and long-term response into a coherent financing architecture.
- Address remaining financing gaps for all MCM and create surge financing capacities for non-vaccine MCM, including diagnostics, therapeutics and personal protective equipment (PPE).

5. Strengthen the global health architecture for PPPR by improving coordination, complementarity and alignment

Global health architecture reform should prioritise clear roles and stronger alignment across institutions. Financing should be coordinated and aligned with national priorities, reducing duplication and transaction costs. The proposed Coordinating Financial Mechanism of the Pandemic Agreement offers an opportunity to improve coherence by aligning and strengthening existing financing instruments.

Recommendations

- Support national preparedness and responses by aligning funding with national plans so that external funding is directed towards agreed national priorities.
- Future financing architecture for PPPR should combine the speed and flexibility of grant-based surge mechanisms with the scale, balance-sheet capacity and long-term financing of MDBs.

Conclusion

The global community now has a critical opportunity to reform the PPPR financing architecture. Success will depend on combining rapid, grant-based, at-risk surge financing with the scale and sustainability of MDB financing – while ensuring strong coordination, equity and country ownership.

At the centre of this effort is immunisation – a proven, cost-effective intervention that underpins prevention, preparedness and response. Strengthening routine immunisation, scaling at-risk financing and aligning global mechanisms will be essential to protect populations, reduce and mitigate future pandemic risks, and safeguard global health security.

Introduction

Pandemic prevention, preparedness and response (PPPR) has emerged as an urgent global priority in the face of increasingly frequent and complex health threats, yet investment in this area remains insufficient and fragmented. A rapidly evolving risk landscape – driven by, inter alia, climate change, zoonotic spillover, conflict, fragility and misinformation – has heightened both the likelihood and impact of outbreaks.

The COVID-19 pandemic exposed profound weaknesses in global preparedness and response systems. Delayed mobilisation of financing, severe inequities in vaccine access – despite the efforts of Gavi and others – and highly concentrated manufacturing capacity meant that many LMICs experienced significant delays in accessing life-saving vaccines.[2] Similar challenges were seen in earlier crises, including the 2014–2016 Ebola outbreak in West Africa, where slow international response and inadequate health system capacity contributed to widespread loss of life,[3] and more recently in mpox outbreaks, where funding and MCM deployment lagged behind need. The 2026 Ebola outbreak in the Democratic Republic of Congo highlights the importance of surveillance and laboratory systems, case management capacities and community engagement, especially in the absence of vaccines. These examples highlight persistent gaps in preparedness investment, fragmented financing and insufficient surge capacity, leaving the world exposed to preventable health, economic and security shocks. Surge financing is particularly critical in the first days and weeks of an emergency, when rapid access to liquidity can determine whether countries and partners are able to procure vaccines and other medical countermeasures (MCM), support delivery, sustain essential services and contain an outbreak before it escalates.

Against this backdrop, ongoing reforms to the global health architecture present an opportunity to strengthen PPPR systems. The adoption of the World Health Organization (WHO) Pandemic Agreement and amendments to the International Health Regulations (IHR) signal a renewed commitment to collective action, equity and coordinated financing. New mechanisms, such as the Coordinating Financial Mechanism (CFM) and Global Supply Chain and Logistics Network, are intended to address long-standing challenges in alignment, and coordination of funding and delivery systems. Integral to this evolving architecture is the need to recognise the benefits of routine immunisation and immunisation systems as a global public good, critical not only for preventing disease and outbreaks, but also underpinning resilience, equity and rapid response.

Investment in PPPR matters

Investment in PPPR is foundational to global health security because it reduces the likelihood, scale and impact of infectious disease outbreaks.[4] Evidence consistently shows that early, sustained investment in surveillance, immunisation systems, and MCM enables faster detection and containment of emerging threats, preventing local outbreaks from escalating into regional and global crises and thereby protecting vulnerable populations.

Resilient immunisation systems are particularly critical: they maintain population immunity, prevent the resurgence of vaccine-preventable diseases during crises, and provide established and response-ready delivery platforms for rapid vaccination in

emergencies.[5] The COVID-19 pandemic imposed enormous economic costs, with global losses through 2024 estimated at around US$ 13.8 trillion[6] – far exceeding the cost of maintaining effective preparedness systems. However, many mitigation measures, particularly vaccination, testing and preparedness investments, proved highly cost-effective. A systematic literature review found that several interventions – including COVID-19 vaccination programmes—delivered strong value for money, and significant health and economic benefits.[7]

Evidence also underscores the link between health security and equity: delays in availability of vaccines, diagnostics[8] and therapeutics – especially in LMICs – result in unequal and untimely access to essential MCM, undermining local and global containment efforts.

Timely investment in PPPR helps to avoid or mitigate these shocks by enabling rapid outbreak control, maintaining workforce productivity and preserving supply chains. Early financing – particularly surge financing – ensures that governments can act decisively at the onset of a crisis, saving lives and reducing the need for costly emergency measures later.

Immunisation is pivotal in PPPR

Immunisation currently prevents an estimated 3.5–5 million deaths every year from diseases like measles, diphtheria pertussis (whooping cough) and influenza.[9] In just 25 years, Gavi has helped to immunise over 1.2 billion children in lower-income countries, preventing more than 20.6 million deaths and helping to reduce child mortality by 50% across 78 lower-income nations.[10] The benefits of immunisation – reducing the emergence and spread of infectious diseases, achieving disease eradication and elimination, protecting vulnerable populations and enhancing global health security – must be widely recognised as global public goods, delivering benefits that extend beyond national borders.

Immunisation is widely regarded as one of the best buys in public health, with an exceptional return on investment: with each US$ 1 invested bringing US$ 54 in wider economic benefits.[11] In a context of constrained resources, immunisation offers exceptional value for money, enabling countries to invest in primary health care while simultaneously strengthening PPPR.

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Resilient immunisation systems, characterised by well trained and adequate staff, robust supply chains, community engagement and integration with broader health services, are essential for closing the immunity gaps, maintaining vaccination coverage during crises and ensuring rapid recovery post-disruption.[12,13] Thus, vaccines and immunisation programmes have a central role across the PPPR spectrum.

1. **Prevention:** routine immunisation forms the first line of defence by reducing the burden of vaccine-preventable diseases and preventing outbreaks.

2. **Preparedness:** investment in vaccine research and development platforms, manufacturing capacity and delivery systems primes the pandemic ecosystem for effective early response.

3. **Response:** timely and equitable vaccination reduces transmission, prevents overload of health systems, and reduces the health, societal and economic impacts of pandemics.

Outbreak response vaccination plays a pivotal role in reducing the health and economic impacts of outbreaks of vaccine-preventable diseases. Between 2000 and 2023, data from 210 outbreaks in 49 LMICs[14] showed that outbreak response immunisation averted 5.81 million cases and 327,000 deaths, including 4.01 million measles cases (20,000 deaths), 283,000 cholera cases (5,215 deaths) and 1.5 million yellow fever cases (300,000 deaths). Furthermore, outbreak response vaccination averted 14.6 million disability-adjusted life years (DALYs) and generated US$ 31.7 billion in economic savings. The earlier the immunisation response started, the greater the impact. Timely access to vaccines for preventive vaccination campaigns and outbreak response, including through Gavi-funded global emergency stockpiles, reduces the risk of outbreaks and reduces outbreak size and severity.

Between 2000 and 2023, data from 210 outbreaks in 49 LMICs showed that outbreak response immunisation averted 5.81 million cases and 327,000 deaths.

The **Pandemic Agreement** explicitly recognises immunisation as a critical element of PPPR (article 4 para 2(f)).[15] The agreement places equity in access to vaccines and other MCM at its core; and commits countries to strengthening routine immunisation programmes and timely supplementary vaccination as part of pandemic prevention strategies. It further establishes mechanisms to support equitable access to vaccines during health emergencies and recognises the importance of addressing the needs of vulnerable populations, particularly those in fragile, conflict affected and resource-constrained settings.

Lessons from past health emergencies for stronger PPPR

Significant investments and mechanisms have emerged since the COVID-19 pandemic and other recent health emergencies to address shortfalls identified during the response.

1. End inequitable access: build systems that guarantee timely and fair distribution of MCMs

Persistent global inequity is the most consistent lesson across the COVID-19 pandemic and other public health emergencies of international concern (PHEIC).[16] Key enablers to achieve equity include robust global frameworks, diversified manufacturing, harmonised regulatory systems and strengthened regional capacity. Negotiations are advancing on the annex to the Pandemic Agreement that will establish the PABS sharing system: the legal framework for the sharing of pathogens and genetic sequence information; and, importantly, the sharing of resultant vaccines, treatments and diagnostics. Until the PABS Annex negotiations are concluded, an interim coordination mechanism

(i-MCM Net) is in place to support timely and equitable access to MCMs.

2. Shift from reactive, voluntary funding to upfront financing that deploys on day zero

The COVID-19 pandemic showed that late, uncertain and voluntary funding undermines the speed and equity of response efforts. An effective response requires upfront ('day zero') financing: pre-arranged funding that can be deployed rapidly through clear triggers and which is committed at risk before key uncertainties have been resolved. Established in 2024, Gavi's Day Zero Financing Facility for Pandemics (DZF) is an innovative financing mechanism comprising a US $500 million First Response Fund (FRF) to provide surge funding within the first 50 days of a health emergency; and up to US$ 2 billion in frontloading facilitiies for follow-on response. The FRF was first deployed in 2024 when up to US $50 million was approved to support mpox vaccine procurement (500,000 doses) for Central and West African countries. It was also **recently activated** in May 2026 to respond to the Bundibugyo Ebola disease outbreak, providing up to US$ 40 million to accelerate access to investigational and approved vaccines, along with a further US$ 10 million to support outbreak response and protect routine immunisation services in affected countries.[17] To complement the FRF, a surge financing mechanism for other MCMs, including diagnostics, therapeutics and PPE, should be prioritised.

> **"It is better to overreact than to underreact. At the first sign of an outbreak, we have a rapid response team to investigate and stop it in its tracks. ... What we found critically important is early diagnosis, quick triggers and the speed of the response."**
>
> **H.E. Dr Austin Demby**
> Minister of Health of Sierra Leone, May 2026

3. Reduce dependency and secure equitable access to MCMs by investing in regional manufacturing

The COVID-19 pandemic revealed the world's heavy reliance on limited global manufacturing hubs and vulnerability to export restrictions. Lack of regional production capacity delayed access for LMICs. For example, the African region relies heavily on vaccine importation, manufacturing only 0.1% of the world's vaccine production, yet representing 20% of its population.[18] To strengthen regional manufacturing capacity, in June 2024 Gavi launched the African Vaccine Manufacturing Accelerator (AVMA), a financing mechanism that will provide up to US$ 1.2 billion over ten years to support the growth of sustainable vaccine manufacturing in Africa, aligned with African Union's goal of producing 60% of the continent's vaccines domestically by 2040,[19] thus reducing dependence on imports and enhancing resilience during health emergencies.[20]

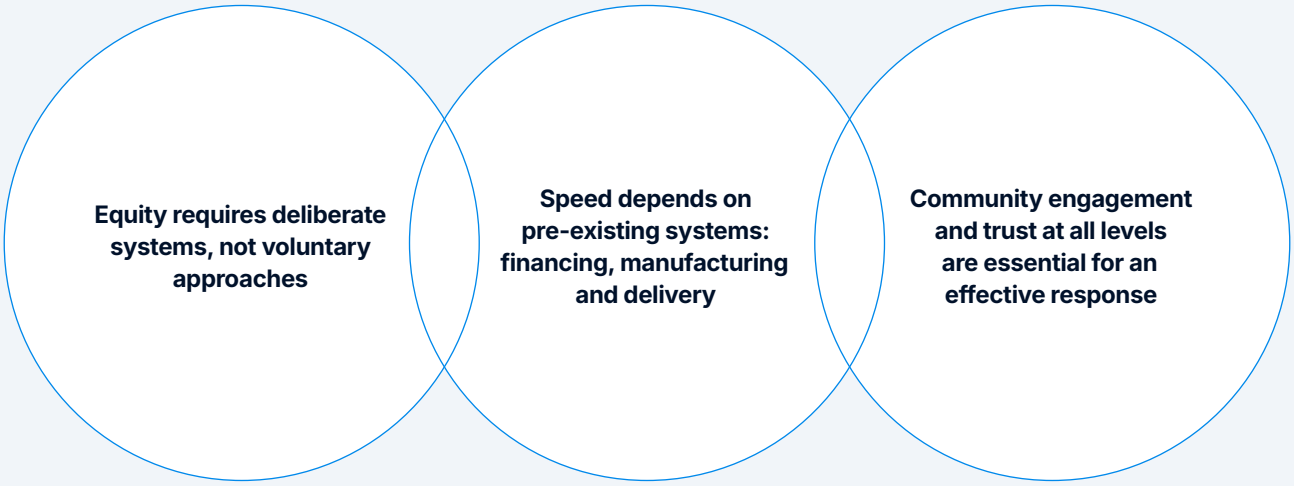
4. Build trust by engaging communities and counter misinformation proactively

Community engagement plays a vital role in building trust and vaccine confidence, and ensuring vaccines reach priority populations during public health emergencies. During the COVID-19 pandemic, mistrust, stigma and misinformation led to reduced vaccine uptake in key populations and contexts. The co-conveners of **COVAX**, the vaccines pillars of the Access to COVID-19 Tools (ACT) Accelerator, expanded their efforts on misinformation, trust and risk communication. This work has informed Gavi's 2026–2030 strategy (Gavi 6.0) and programming, including securing funding to strengthen partnerships with civil society and community-based organisations. Moving forward, global health institutions such as Gavi and its Vaccine Alliance partners must continue to build trust in scientific evidence and health information – notably by demonstrating the real impact of mis- and disinformation on health outcomes, and working with technology and social media platforms to address systemic imbalances in the information ecosystem.

5. Shift to a country-led, better aligned and coherent global health architecture

The global health architecture is complex, fragmented and often slow to respond to crisis. COVAX showed that multipartner models can facilitate delivery and regulatory support, but also can reduce agility and accountability.[21] The Pandemic Agreement and amendments to the IHR have strengthened the global legal architecture; and have the potential to improve how the world prevents, detects and responds to outbreaks, with a stronger emphasis on cooperation and equitable access. Across the COVID 19 pandemic and previous large-scale health emergencies, the evidence converges on three overarching lessons:

Diagram 1: Overarching lessons from the COVID-19 pandemic and large health emergencies



6. Close delivery gaps: invest in integrated, country-led immunisation systems

During the COVID-19 pandemic, weak delivery capacity constrained vaccine uptake even as supply improved. Disruptions to routine immunisation also increased the risk of other public health emergencies, including measles and polio. Vaccines achieve their full life-saving potential only when supported by strong logistics, a well-trained health workforce, robust data systems and integration of immunisation services with primary care. Gavi strengthens delivery systems by investing across the entire immunisation continuum to ensure vaccines reliably reach all populations, particularly the most under-served. Under Gavi's 2026–2030 strategy (Gavi 6.0), this approach is further sharpened, with a stronger emphasis on equity and 'zero-dose' children, health system strengthening as a core pillar and a shift towards more country-led, sustainable systems – giving governments greater control over planning, financing and delivery of immunisation programmes.[22]

7. Break the panic-neglect cycle: institutionalise preparedness through sustained financing and legal frameworks

Lessons from past public health emergencies, including Ebola, H1N1 and Zika, were often identified but not systematically applied ahead of COVID 19, reflecting a persistent 'panic–neglect cycle' in global health investment.[23] Breaking this cycle requires viewing preparedness as a sustained investment rather than a cost, and embedding it through durable political commitment, appropriate legal frameworks, strengthened systems and more effective global coordination. Drawing on lessons from COVID-19

and previous emergencies, Gavi has made several important investments, including the launch of the Day Zero Financing Facility for Pandemics (DZF) and its First Response Fund (FRF), support for regional vaccine manufacturing, and efforts to streamline funding requests and allocation processes – enabling countries to play a stronger role in determining how resources are used.

"Immunisation is our first line of defence for global health security, but it cannot stand alone. To prevent the next pandemic, we need strong, equitable immunisation systems backed by surge financing that moves at the pace of an outbreak, not the pace of bureaucracy. That means combining rapid, at-risk funding on day zero with the scale of multilateral development banks, all aligned behind country-owned plans. Either we invest steadily in preparedness now, or we pay a far higher price in lives and livelihoods when the next crisis hits."

Dr Sania Nishtar
CEO of Gavi, the Vaccine Alliance, May 2026

"The Lao People's Democratic Republic's commitment to digitising vaccine records in every one of the 1,081 health facilities sets an important example of how to harness innovation to leave no child behind."

Watch the video on Gavi CEO Dr Sania Nishtar's LinkedIn channel
Credit: Gavi/2024/Running Reel

Financing PPPR at the speed and scale required

The PPPR financing gap is large and widening

There remains a critical and widening financing gap in PPPR. Annual investment needs for preparedness in LMICs, as well as for global and regional public goods, are estimated at US$ 10–15 billion, yet current funding falls well short of this requirement. The gap becomes even more stark during crises: scaling up an effective pandemic response requires an estimated US$ 50–100 billion in surge financing.[24,25,26,27] Although beyond the scope of this paper, it is clear that a new model of sustainably financing PPPR as a global public good is required and should be explored, with consideration given to innovative risk-sharing mechanisms

Preparedness financing remains undercapitalised

Preparedness financing is relatively well developed but remains undercapitalised to support long-term investments in surveillance, workforce, laboratories and health systems. Gavi and the Global Fund play important, complementary roles in preparedness financing by investing in the systems countries rely on before and during public health emergencies. Through routine immunisation and support for preventive vaccination campaigns, Gavi helps countries close immunity gaps, reduce the risk of vaccine-preventable outbreaks and strengthen delivery platforms that can be mobilised during crises. In addition, the establishment of the Pandemic Fund in 2022, following the recommendation of the G20 High Level Independent Panel on Pandemic Preparedness and Response, has contributed to fill the prevention and preparedness gap, with US$ 1.4 billion in grants awarded to LMICs to strength IHR capacities through its first three funding rounds.

Surge financing must match the speed of public health emergencies

Once a public health emergency is declared, surge financing must deploy within days, operate under conditions of uncertainty, and support rapid operational and procurement decisions before needs are fully known. To date, surge financing remains patchy and fragmented, with the amounts falling far short of estimated requirements. The challenge is not solely the availability of funding, but also access to immediate liquidity. Resources must be available and deployable at the pace required by rapidly evolving outbreaks. Gavi's FRF is a valuable and credible surge financing innovation with demonstrated success during the 2024 mpox response and deployed during the recent Bundibugyo Ebola disease outbreak in the Democratic Republic of Congo. A similar mechanism does not exist for diagnostics and therapeutics. In addition, to ensure equitable access for populations in fragile and humanitarian contexts, it is important that surge mechanisms enable access to funding for non-state actors such as non-governmental organisations when governments cannot deliver services in hard-to-reach areas.

At-risk financing is particularly important in outbreaks, epidemics and pandemics. This means that funds are committed and spent before key uncertainties are resolved. The "risk" refers to the possibility that investments may not ultimately be needed, used or successful. Mechanisms such as advance purchase agreements with manufacturers are signed early – with the risk that funds are committed on products, such as vaccines or treatments, that may not be needed or are overtaken by a better alternative. To not accept this risk means far slower response times or that other buyers may purchase products that are eventually needed but no longer available. Thus, effective surge financing tools require institutions to absorb or support at-risk decisions.

Gavi is one of the few global health actors with a dedicated at-risk financing mechanism: the First Response Fund (FRF) provides immediate, pre-arranged funding and takes on financial risk up front to enable rapid and equitable vaccine access at the start of a health emergency.

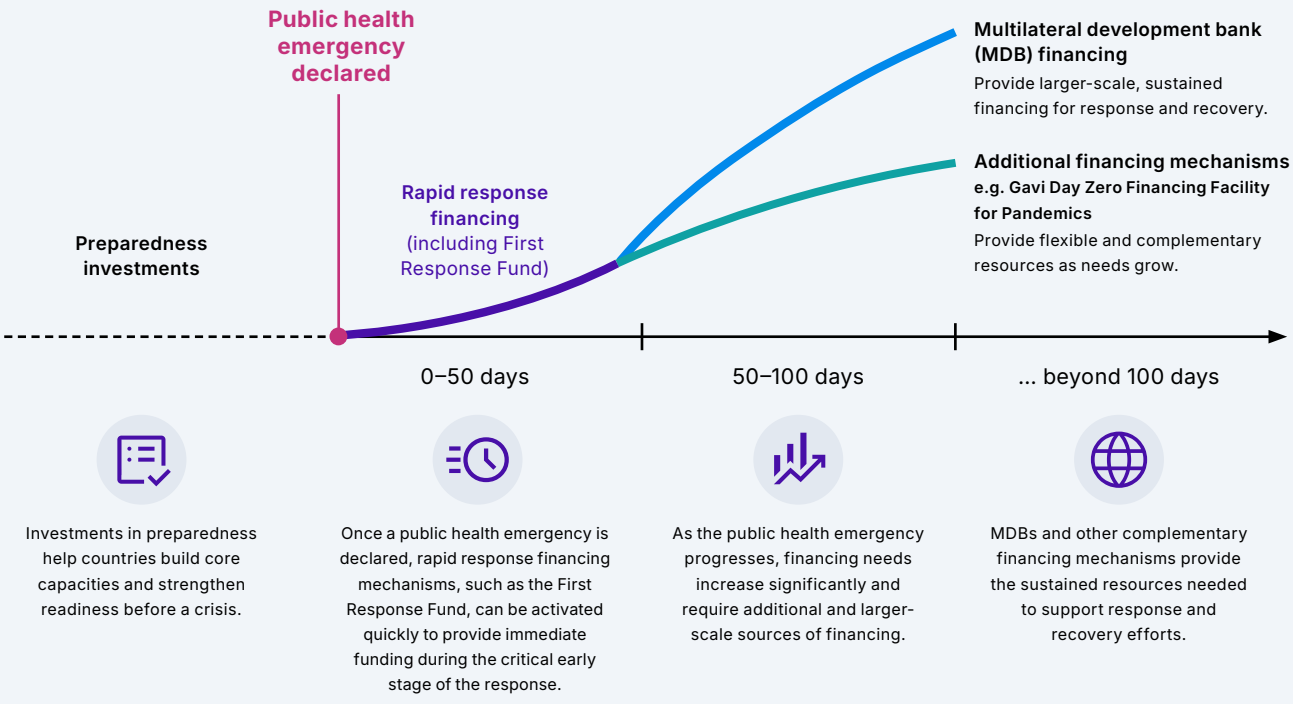
Effective pandemic financing requires a layered approach

Recent health emergencies have demonstrated that rapid grant-based surge financing, while essential, is insufficient for the potentially very large financing requirements of a severe pandemic. Effective pandemic financing requires a layered approach that combines the speed and flexibility of at-risk mechanisms with access to substantially larger-scale financing from MDBs. While MDBs have the balance sheet capacity to mobilise resources at scale, they currently lack dedicated mechanisms to deploy capital rapidly and at risk during the earliest stages of an outbreak. Developing such capabilities would help bridge the gap between rapid surge financing and large-scale response financing.[28]

The gaps in the speed and scale of financing and the low-risk appetite among financing institutions are further compounded by the need for a seamless transition between rapid surge financing during the early response phase and longer-term, larger scale mechanisms that arrive later. While rapid emergency financing mechanisms exist for the first days and weeks of an outbreak, and larger financing instruments become available sometime later – there remains a critical 'missing middle' – financing mechanisms capable of rapidly transitioning from emergency response funding to large-scale sustained response without interruption. As a result, the current system jumps from relatively small, rapid funds to slower, larger financing.

This graphic illustrates how pandemic preparedness and response financing evolves over the course of a public health emergency:

Diagram 2: Pandemic financing across the preparedness and response continuum



Financing vaccines in emergencies requires speed, risk tolerance and market shaping

Beyond surge, at-risk financing, vaccine financing in emergencies has distinct features driven by urgency, uncertainty and global demand. Financing may be needed simultaneously across research, manufacturing, procurement and delivery, rather than sequentially. The 2026 Bundibugyo Ebola disease outbreak illustrates this challenge: with no approved vaccine at the time of the outbreak, partners had to consider funding multiple vaccine candidates and manufacturing pathways before knowing which products, if any, would prove safe and effective. In such circumstances, decisions cannot wait for evidence-based recommendations; institutions must commit resources at risk to accelerate product development, procurement and deployment.

Mechanisms must therefore operate at scale and speed, using market shaping tools such as advance purchase agreements and volume guarantees to secure supply in constrained markets, while explicitly addressing equity and access for LMICs despite competition with wealthier nations. Financing must also support systems required for effective delivery. Gavi's advantage in emergency vaccine financing lies in its unique ability to combine financing, market shaping and delivery at global scale, drawing on deep experience in reducing prices, incentivising production expanding the supplier base – and ensuring timely and equitable allocation.

A fragmented PPPR financing architecture

While significant progress has been made in addressing gaps in the PPPR financing ecosystem, important challenges remain – providing opportunities for further reform, alignment and collaboration. The current global health security financing architecture brings together a diverse set of complementary actors, each with distinct strengths. There is growing focus on strengthening core IHR capacities – including surveillance, laboratories and the health workforce – supported by catalytic financing that mobilises additional resources, while advancing innovation and regional manufacturing. Across these efforts, equity remains central, with grant-based mechanisms prioritising access for LMICs. At the same time, the system is evolving to include more innovative financing tools, such as guarantees, contingent finance and pooled procurement, alongside in-kind and market shaping mechanisms that reduce prices and accelerate supply of vaccines, diagnostics and medicines. Many of these instruments enable rapid disbursement – often within hours to days – providing flexible, 'no regrets' funding for early outbreak response. Despite these advances, the system remains fragmented and uneven, with weak limited alignment and coordination across institutions – driving inefficiencies and increasing transaction costs for countries. The system relies heavily on short-term, donor-driven funding cycles, limiting predictability, scale and long-term sustainability. Most available instruments are designed for short-term response, with limited pathways to transition to sustained, large-scale financing. While development finance institutions can mobilise substantial resources, barriers such as debt constraints and fragility often restrict access for the countries most at risk, reinforcing inequities.

The Coordinating Financial Mechanism can improve alignment

To address these challenges, **a Coordinating Financial Mechanism** has been proposed under the amended IHR and the Pandemic Agreement. While the terms of reference are yet to be developed, Gavi envisions a mechanism that strengthens alignment across existing financing instruments; helps countries quickly navigate financing options in emergencies – prioritising speed, flexibility and clear decision-making; and promotes sufficient financing across the full PPPR continuum. Sierra Leone's experience of effectively combining domestic resources with Gavi's FRF during the 2025 mpox outbreak is highlighted below.

Case study:
Sierra Leone

Combining domestic resources with surge financing

Sierra Leone was severely affected by the **2014–2016 Ebola virus disease outbreak**, which claimed nearly 4,000 lives and devastated the health workforce. With limited domestic resources, the country relied heavily on external support. In response, Sierra Leone established a **Trust Fund** in 2015 to enable rapid mobilisation of **domestic financing** during public health emergencies, designed to cover the first 30 days of response.

The fund was activated during the 2025 mpox outbreak in Sierra Leone, which began in January and quickly spread to all 16 districts. The government released US$ 1.7 million to support surveillance, case finding, risk communication, treatment centres and laboratories. Given that mpox is vaccine-preventable, Sierra Leone also accessed Gavi's **First Response Fund**, receiving around 110,000 vaccine doses and US$ 1.2 million to support deployment. Vaccination targeted health workers, contacts and high-risk groups, including people living with HIV, with the first campaign launched in March – less than two months after the initial cases.

In total, the outbreak resulted in over 5,000 confirmed cases and 60 deaths. Sierra Leone's experience underscores the importance of combining **rapid domestic financing** with **surge support** from global mechanisms, such as Gavi's FRF.[29]

Mpox vaccination, Sierra Leone, April 2025

Credit: Gavi/2025/Dominique Fofanah

Policy opportunities and recommendations

Based on Gavi's experience and analysis, the following policy priorities and recommendations are intended to guide Member States, intergovernmental organisations, MDBs and global health organisations as they shape the future global health architecture and engage in multilateral negotiations.

1. Invest in immunisation to build robust PPPR foundations

Strong and equitable immunisation programmes, integrated into primary health care, are the foundation of PPPR. At country level, routine immunisation should be funded as a core budget line and delivered through a life course approach, including maternal and child health, school health, adolescent services and non-communicable disease programmes. Resilient immunisation systems are more flexible and effective in emergencies, including in fragile and humanitarian settings; and require sustained investment in delivery capacity, including cold chain infrastructure, digital registries and data systems, supply forecasting and a skilled health workforce.

Recommendations

- Increase investment in strong and equitable national immunisation programmes as a core component of primary health care to advance Universal Health Coverage and strengthen global health security.
- Support pooled procurement, and well-funded and replenished global vaccine stockpiles; and maintain rapid response funding for allocation and delivery during public health emergencies.

2. Strengthen PPPR capacities through domestic financing and partner alignment with national priorities

In line with the Gavi Leap principles,[30] external financing should reinforce country ownership by aligning with national plans; giving countries greater agency over how resources are deployed; and supporting co-financing approaches that facilitate countries to move towards self-reliance. By aligning external support with national priorities and strengthening domestic institutions, partners can help build more resilient systems that are better prepared to prevent, detect and respond to future health emergencies.

Within countries, stronger coordination between ministries of health and finance is essential, supported by joint planning processes that integrate PPPR priorities into national budgets and broader fiscal frameworks. Countries should also increase domestic investment in health and preparedness, including through innovative domestic financing approaches such as earmarked taxes or other revenue mechanisms.[31]

Recommendations

- Strengthen core PPPR capacities at national level through sustained investment in surveillance systems, including community- and facility-based detection for timely notification of public health events; laboratory capacity, including staff training and deployment of rapid tests; and human resources for health, including surge deployment.

- Embed PPPR priorities within national planning and budgeting processes, including through closer collaboration between ministries of health and finance; and increase domestic resource mobilisation, and alignment of external financing with national priorities.

3. Improve equitable access to MCM, including vaccines

COVID-19 and other recent health emergencies, including mpox, showed that inequitable access to vaccines, diagnostics, therapeutics and other MCM can delay outbreak control and deepen health and economic impacts, particularly in LMICs. The adoption of the Pandemic Agreement, the ongoing PABS Annex negotiations and interim mechanisms such as the iMCM-Net reflect growing recognition that equity must be at the centre of PPPR. Global health security also depends on geographically diversified manufacturing, resilient supply chains and efficient regulator systems. Expanding regional production, improving logistics, and harmonising regulatory processes will accelerate access and reduce dependency on limited suppliers.

Recommendations

- Support a strong, inclusive and effective PABS system to translate equity aspirations on access and benefit-sharing into binding commitments.

- Support long-term investments that strengthen local and regional manufacturing capacity, ensuring that all regions can rapidly produce vaccines and essential supplies during a crisis.

4. Build a faster, scalable and better-connected PPPR financing architecture

Outbreaks, epidemics and pandemics require predictable, scalable financing that can be released quickly through clear, pre-agreed triggers, including WHO gradings and PHEIC declarations. This means maintaining and, where possible, expanding pre-positioned funds, while making greater use of fast-disbursing instruments such as contingency funds, credit lines and other flexible financing tools. Surge financing is particularly important because as it gives countries and partners the liquidity needed to act early to contain the public health emergency, even before uncertainties are resolved. This requires financing mechanisms that are not only rapid, but also risk-tolerant and able to operate at sufficient scale.

While significant progress has been made through existing preparedness and response financing instruments, current arrangements remain fragmented and are not designed to sustainably finance PPPR as a global public good. There is therefore a need to explore new financing approaches, including innovative risk-sharing mechanisms, that can mobilise resources at the scale and speed required In this context, MDBs should play a stronger role by adapting approval processes, mobilising at-risk financing in the earliest stages of an outbreak, expanding rapid-response financing capabilities and providing larger-scale support as countries transition from emergency response to sustained recovery.

Recommendations

- Scale up and better connect existing PPPR financing mechanisms by combining rapid at-risk financing, MDB financing and long-term response into a coherent financing architecture.

- Address remaining financing gaps for all MCM and create surge financing capacities for non-vaccine MCM, including diagnostics, therapeutics and PPE.

5. Strengthen the global health architecture for PPPR by improving coordination, complementarity and alignment

Global health architecture reform is essential for an effective PPPR system. Reform requires consideration of the complementarity and often specialised roles of different actors. A coherent approach to reform will promote clear roles that reinforce complementarity, draw on comparative advantages, and are aligned to deliver timely and equitable outcomes. At country level, funding should be aligned with national plans so that external funding is directed towards national priorities under a process that is facilitated by joint planning among all relevant stakeholders. At global level, establish a coordinating financing mechanism that builds on existing mechanisms; reduces duplication; supports seamless transitions between preparedness financing, surge financing and sustained response financing; and serves as a single entry point for information and coordination for countries during emergencies.

Recommendations

- Support national preparedness and responses by aligning funding with national plans so that external funding is directed towards agreed national priorities.
- Future financing architecture for PPPR should combine the speed and flexibility of grant-based surge mechanisms with the scale, balance-sheet capacity and long-term financing of MDBs.

"Thanks to COVID-19 vaccines, I can work again. My goal is to start a taxi service to secure my daughter's education and future." Shekh, 25, with his wife and their two-year-old daughter. **Read the full article**

Dhaka, Bangladesh

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