UK Committee for UNICEF

REPORT

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# PATH TO PROGRESS:

## IMMUNISATION BEYOND COVID-19

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# EXECUTIVE SUMMARY

## Immunisation systems must have sufficient capacity to cope with increased demand and to administer new and existing vaccines.

The response to the COVID-19 pandemic, in particular the vaccine rollout, presents many challenges and opportunities for routine immunisation services. Immunisation has never been so high on national and global political agendas, generating unprecedented conversations about the importance of vaccination as a global public health tool. However, discussions and commitments continue to centre around COVID-19 vaccines only, despite ongoing disruptions to critical childhood immunisation programmes and emerging evidence of the negative impact of national COVID-19 vaccination campaigns in low- and middle-income countries (LMICs), which leave children vulnerable to vaccine-preventable – yet deadly – diseases.

Many LMICs are facing unprecedented challenges to restore, maintain and increase uptake of routine immunisation services, while delivering COVID-19 vaccines in record time to their populations.

Increasing the uptake of COVID-19 vaccines globally is imperative, however it must not come at the expense of vital capacity and resources for child routine immunisation services. In 2020, over 23 million children missed out on essential vaccines – an increase of 3.7 million from 2019[1] – due to COVID-19 disruptions.

This new report finds that strengthening of national immunisation and health systems is key to addressing and overcoming existing barriers to accessing routine immunisation services that existed before the pandemic. Opportunities to invest in, and strengthen, immunisation systems must be prioritised


Nurse Hana Barakat prepares a vaccine for a child at a clinic in Ramallah, State of Palestine.


A baby gets her routine vaccines and health check at a health centre in Gonzagueville, south Côte d'Ivoire.

to intensify routine vaccination catch-up campaigns as a matter of urgency, increase equity in delivery of childhood vaccinations, tackle declining vaccination rates, reach unvaccinated children, and accelerate progress on childhood immunisation and long-term targets to end vaccine-preventable child deaths and the realisation of Immunisation Agenda 2030.

National and donor funding for routine immunisation and vaccination campaigns must also be protected and increased to ensure that more children get access to basic life-saving vaccines. To protect essential routine immunisation services, COVID-19 vaccination operational costs must be fully and independently financed to ensure that essential health workforce capacity and resources are not diverted away from the delivery of routine immunisation services. "Business as usual" no longer applies in current settings and governments must consider the unique opportunities provided by routine immunisation systems to deliver other essential child health services that remain affected by COVID-19 related disruptions, and when combined will benefit health systems and generate transformational changes. These benefits include improved child health and more equitable service delivery for the most marginalised children.

Additionally, advancements in vaccine research and development (R&D) present an exciting opportunity to prevent child mortality through the introduction of new vaccines and the geographic expansion of manufacturing. To harness these opportunities, immunisation systems must have sufficient capacity to cope with increased demand and administer new and existing vaccines.

The UK Government has long been a leader in supporting immunisation programmes around the world, playing a significant role in funding the Global Polio Eradication Initiative (GPEI) in 1988, and Gavi, the Vaccine Alliance in 2000. The UK has been one of the leading donors to these institutions and has played an integral role in shaping global immunisation policy through its governance positions on the boards of numerous immunisation and global health multilateral organisations. Since 2000, UK aid, along with other donors, has helped to immunise over 760 million children and save over 13 million lives.[2]

The UK Government also plays a significant role in supporting UNICEF, the WHO Expanded Programme on Immunization (EPI) and bilateral Official Development Assistance (ODA) to Foreign Commonwealth and Development Office (FCDO) priority countries.

Seizing the opportunity to strengthen immunisation systems requires renewed global political will for childhood routine vaccinations that the UK Government is uniquely placed to lead as a major donor with significant influence

over the global immunisation policy agenda and with a key role in global public health and political platforms. Leadership on immunisation will also be integral to realising the UK's commitment to ending preventable deaths of women, newborns and children by 2030. The UK Government's long-standing support, as well as financial and technical leadership on the immunisation agenda, must continue to drive global collective efforts to vaccine every child.

## UK COMMITTEE FOR UNICEF RECOMMENDATIONS TO THE UK GOVERNMENT

1. Ensure that addressing declines in routine immunisation and promoting increased uptake of routine immunisation services is a key priority for action at global political and public health platforms in 2022 and beyond, including the G7, G20 and World Health Assembly.

2. Operationalise the FCDO health systems' strengthening strategy[i] and ensure that maintaining and strengthening routine immunisation services is prioritised.

3. Honour pre-existing commitments to immunisation partners including Gavi 5.0, the Global Polio Eradication Initiative (GPEI), bilateral programming and the Expanded Programme on Immunisation and UNICEF.

4. Provide £1 billion in additional support to Access to COVID Tools Accelerator (ACT-A)[ii] partners and in-country delivery costs for the international COVID-19 response in 2022, ensuring that COVID-19 vaccine delivery and operational costs are fully financed. The UK should also ensure that all financial support for the global COVID-19 response is additional to the 0.5% of GNI ODA budget and not at the expense of existing commitments to global health and other essential services.

5. Use their governing role on global health multilateral boards to ensure core focus and core funding is maintained on reaching zero-dose children, equitable vaccination and polio eradication. The governance role must also be utilised to ensure cohesive approaches among global and immunisation actors to strengthen vaccination systems and balance the delivery of COVID-19 vaccination and routine immunisation services to prevent further disruption to childhood vaccination.

6. Build on its leadership in hosting the 2022 Global Pandemic Preparedness Summit by working with global health stakeholders to prioritise strengthening vaccination systems and committing to leading efforts to strengthen global health security by ensuring these systems are suitable to deliver new vaccines for future emergencies, while sustaining and increasing the uptake of new and existing childhood vaccines.

i In December 2021, the FCDO produced a health systems strengthening positioning paper. Available at: www.gov.uk/government/publications/health-systems-strengthening-for-global-health-security-and-universal-health-coverage

ii ACT-A is a global collaboration framework designed to increase access to COVID tools. Partners include the WHO, UNICEF, Gavi, the Global Fund, Unitaid, CEPI, FIND, the World Bank and the Bill and Melinda Gates Foundation.

# INTRODUCTION

In 2020, more than 23 million children missed out on essential vaccines – an increase of 3.7 million from 2019.

The immunisation agenda is at a pivotal moment and as a result children's lives and futures are at risk. COVID-19 presents severe challenges to years of progress on immunisation, with millions of children missing out on essential vaccines because of ongoing disruption to routine immunisation. Additionally, the rollout of COVID-19 vaccines presents significant risks and challenges for immunisation campaigns – the urgent need to increase the COVID-19 coverage rates in LMICs presents a threat to countries' capacities to run COVID-19 vaccination and routine immunisation concurrently, with limited financial resources for operational costs and limited health workforce capacity.

However, the COVID-19 response also offers a unique opportunity to reinvigorate immunisation, overcome existing barriers to accessing vaccine services that existed before the pandemic and invest in, strengthen and prioritise immunisation systems strengthening. Doing so will accelerate progress towards the attainment of the Immunisation Agenda 2030 (IA2030) and prevent children suffering and dying from vaccine preventable diseases.

The time to re-imagine immunisation is now. The year 2022 will be critical for child health services, including routine immunisation, as low-income countries (LICs) and LMICs expand their national COVID-19 vaccinations.

**In 2020, more than 23 million children missed out on essential vaccines – an increase of 3.7 million from 2019, unravelling decades of progress on routine immunisation and exposing millions of children to deadly, yet preventable diseases.**[3]


Polio vaccinators go door to door to immunise children in Kart-e-Naw, a suburb of Kabul, Afghanistan.

Afghanistan is one of only three countries in the world where polio remains endemic. There is growing optimism that polio will be the second human disease, after smallpox, to be eradicated. UNICEF is the provider of the polio vaccine in Afghanistan and supports the Ministry of Public Health in distributing critical supplies, especially in high-risk areas.

Most of these children, up to 17 million, did not receive any vaccines at all. Furthermore, 3.5 million more children missed their first dose of diphtheria, tetanus and pertussis (DTP) while a further 3 million children missed their first dose of the measles vaccine.

"The COVID-19 pandemic has reminded the world of the power of vaccines to fight disease, save lives, and create a healthier, safer, and more prosperous future." Immunisation Agenda 2030

Disparities in access to COVID-19 vaccines between high-income countries (HICs) and LICs have been well documented throughout 2021 and into 2022. Even as COVID-19 vaccine supply begins to stabilise, significant challenges remain with fewer than 15% of people in LICs having received at least one dose of the COVID-19 vaccine as of March 2022.[4] The initial phase of the rollout of COVID-19 vaccines highlighted challenges of equitable access to vaccines, a problem faced by routine immunisation services for years.

The pandemic has put the spotlight on the critical role of vaccines in saving lives and their effectiveness as a public health tool. We have a unique opportunity to use the pandemic as a turning point to strengthen and accelerate the broader immunisation agenda, including childhood vaccinations. Seizing this opportunity will require reinvigorated political will for immunisation, the prioritisation of investment in immunisation capacity and systems, and cohesive actions among key global health stakeholders. This should include coordinated approaches to ensure the expansion of COVID-19 vaccination coverage is balanced and well-managed alongside the restoration and increased uptake of routine immunisation services.

The value of immunisation and return on investment, including its long-term impact on children's survival and development, as well as wider socio-economic impact, has long been recognised. However, a lack of global political leadership, diversion of resources to the COVID-19 response, and the deprioritisation of sustainable financing for routine immunisation has led to stagnating vaccination rates, or even in some countries a worrying decline. As a result, millions of children are repeatedly missing out on basic vaccines each year.

COVID-19 vaccination efforts present a watershed moment to reimagine immunisation – to address routine vaccination inequity and the lack of sustainable funding, and to maximise the pivotal role that immunisation campaigns play as an entry point for the delivery of other essential health interventions and build national health systems that are fit for purpose.


A health worker prepares to vaccinate a child against measles and rubella.

SECTION ONE

# ONGOING CHALLENGES TO ROUTINE IMMUNISATION SERVICES


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**Of the 23 million children who did not receive any basic vaccines[5], more than 60% live in just 10 countries (India, Nigeria, Democratic Republic of the Congo, Pakistan, Indonesia, Ethiopia, Brazil, Philippines, Angola, and Mexico).**

The impact of the COVID-19 pandemic on routine immunisation and the delivery of other essential child health services has been catastrophic. Two years of ongoing disruptions have jeopardised decades of progress made in expanding vaccine access and coverage.

## WHO ARE THE ZERO-DOSE CHILDREN?

**Zero-dose children are children who have not received any basic routine vaccines and account for 50% of vaccine-preventable deaths.**[6] They suffer from multiple deprivations – including lack of access to water, sanitation and hygiene, education, essential healthcare, and adequate nutrition. These children are the most marginalised and miss out on even the most basic services. Two-thirds of zero-dose children live below the poverty line, surviving on less than US$1.90 per day, and 50% of them live in urban areas, remote communities, or conflict-affected settings.[7]

Before COVID-19, one in eight children in Gavi-supported countries had received no vaccines and accounted for nearly half of all children dying from vaccine-preventable diseases. The pandemic has led to an almost 30% increase in the number of zero-dose children in Gavi-supported countries.[8]

The pandemic and the ongoing disruptions to immunisation services has led to an increase in the number of zero-dose children across all regions in 2020. This, in turn, has led to disease outbreaks and could potentially lead to an increase in child mortality from vaccine-preventable diseases.


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A girl, age 4, receives vitamin A from a polio vaccinator in Lahore during Pakistan's first national campaign of 2021, aiming to vaccinate over 40 million children under five year of age against polio and provide vitamin A supplements. More than 285,000 workers are engaged in the door-to-door campaign. Pakistan and Afghanistan are the last two countries where the wild polio virus continues to spread and paralyse children.

COVID-19 has halted progress and worsened an existing childhood immunisation crisis. Even before the pandemic, global childhood vaccination rates against diphtheria, tetanus, pertussis, measles, and polio had stagnated for several years at around 86%.[9] This decreased to 83% in 2020 due to COVID-19 related disruptions.[10] South Asia has been the hardest-hit region, with childhood immunisation rates plummeting by 6% between 2019 and 2020, equating to 5.3 million children who missed out on life-saving vaccines, the highest number since 2014.[11] A study carried out across 15 African countries, which compared vaccination coverage pre-COVID-19 with April–June 2020 coverage, found that the countries with lower coverage before COVID-19 experienced the deepest reductions in the number of children vaccinated after the pandemic was declared, demonstrating the disproportionate impact of the disruptions on the most-at-risk children.[12]

## SPOTLIGHT: COVID-19 DISRUPTIONS IN FRAGILE AND CONFLICT AFFECTED SETTINGS

A recent report by UNICEF UK warned of the catastrophic and disproportionate impact of COVID-19 disruptions on life-saving maternal, newborn and child health services that have being halted, reduced, or stopped.[13] In 26 humanitarian response settings, where vaccine coverage was already low, UNICEF data shows that vaccination campaigns were disrupted in 14 settings, with four reporting a 75–100% decline.[14]

The crisis that is unfolding in Ukraine further amplifies the fragility of hard-won gains for childhood immunisation. Before the outbreak of the war, only 53% of one-year olds in Ukraine were vaccinated against polio,[15] with the COVID-19 pandemic further slowing down immunisation efforts. This incomplete coverage led to the emergence of circulating vaccine derived poliovirus (cVDP) in October 2021. The emergence of cVDP is indicative of a country with already low immunisation coverage, a fragile health system and poor sanitation. The current conflict is now threatening Ukraine's ability to respond to the polio outbreak due to vaccination campaigns being suspended, and the disease is now at risk of spreading both within Ukraine and neighbouring countries.

In 2019, a boy receives a measles vaccination at his school in Lviv, western Ukraine. This was part of a widespread campaign to increase the low vaccination coverage among school aged children in Ukraine.

**Three significant policy milestones took place in recent years that could serve to transform dramatically the immunisation landscape and overcome persistent barriers to children attaining their right to good health:**

1. **The Immunization Agenda 2030 (IA 2030),**[16]
2. **Gavi's 2021–2025 strategy (Gavi 5.0),**[17] **and**
3. **The Global Polio Eradication Initiative's (GPEI) new strategic plan (2022–2026).**[18]

These provide unprecedented momentum and are raising ambitions for stronger and more equitable immunisation systems:

1. **IA 2030's** immediate priority is catch-up campaigns for missed vaccinations, supporting the rapid and equitable expansion of COVID-19 vaccine delivery, while strengthening and building immunisation programmes to achieve the goal of saving 50 million lives by 2030.

2. **Gavi 5.0** aims to ensure a further 300 million children are vaccinated by 2025. It also includes a core focus on reaching zero-dose children, with the aim to reduce their number by 25% by 2025 and 50% by 2030, in line with IA 2030's target. The UK has committed to providing £1.65 billion to Gavi 5.0 between 2021 and 2025 – a total of £330 million a year.

3. **The GPEI** strategy focuses on a holistic approach to eliminating polio through vaccination campaigns, with a strong emphasis on increasing the integration of polio activities (such as logistics and surveillance) with essential immunisation and health services. In 2019, the UK Government committed a total of £400 million to the GPEI between 2019 and 2023 (of which less than £100 million has been committed to date). The GPEI is expected to launch a new investment case in April 2022 for their new strategic plan.

**Routine immunisation saves 2 to 3 million children's lives every year, yet 1.5 million children still die from vaccine-preventable diseases each year.**[19]

Although child vaccination rates improved in the later months of 2020, catch-up efforts have been variable and some countries are significantly lagging behind. Existing and new COVID-19 waves, along with the immense pressure of delivering COVID-19 vaccines, are threatening to further disrupt immunisation services in LMICs. The third round of the Global WHO Pulse survey[20] shows that immunisation services were still disrupted in November–December 2021, just as LMICs were increasing or preparing to roll-out COVID-19 vaccines.

## LOWER-INCOME COUNTRIES ARE FACING UNPRECEDENTED CHALLENGES TO DELIVER COVID-19 VACCINES

UNICEF and COVAX partners are supporting countries to implement their national COVID-19 vaccination strategies and domestic targets for COVID-19 tools; however, ongoing challenges remain in turning "vaccines into vaccinations". While COVID-19 vaccines are now more rapidly making their way to LMICs and LICs through mechanisms such as COVAX and the African Vaccine Acquisition Trust (AVAT), a lack of funding to cover operational costs and countries' inability to absorb and administer high quantities of COVID-19 vaccines at the scale and pace required is creating immense and unprecedented challenges for countries' health systems. A joint assessment by UNICEF and partners found that only 30% of 128 LMICs had developed processes to train the large number of vaccinators needed to roll-out the vaccines.[21] The ongoing challenges,

particularly resource and capacity constraints that countries face to deliver COVID-19 vaccines, is having a severe impact on routine immunisation services.

The 92 lower-income Advance Market Commitment (AMC) countries face the enormous task of reaching over 800 million people with COVID-19 vaccines in 2022. By comparison, across all Gavi-supported countries, 822 million people have been reached with routine immunisation between 2000 and 2019.[22] While many countries have achieved significant progress in vaccinating their populations though the EPI, they face challenges in delivering COVID-19 vaccines while also sustaining existing health programmes and routine immunisation services. These often long-standing challenges include weak infrastructure (such as inadequate cold-chain and storage and poor roads to transport vaccines), shortage of supplies (such as syringes and needles), lack of surveillance and monitoring systems, and poor coordination amongst local stakeholders.[23]

Workforce needs are also colossal. In 2021, the WHO estimated that between 90,000 and 411,000 additional healthcare workers (HCWs) are needed to deploy COVID-19 vaccines to the original target of just 20% of people across the 92 AMC countries and maintain current services.[24]

## THE WORRYING TRADE-OFF BETWEEN COVID-19 VACCINATION AND ROUTINE IMMUNISATION

The WHO's latest Global Pulse survey showed that nearly half (49%) of 72 countries indicated that COVID-19 vaccination scale-up had affected outreach services for routine immunisation. Another 45% of 75 countries reported that their COVID-19 vaccination expansion had impacted routine vaccination campaigns of school-aged children and adolescents, while 43% of 86 countries reported disruptions to immunisation services for infants and young children.[25] Emerging evidence from UNICEF country offices confirms this worrying trend. In Ethiopia, for example, the COVID-19 vaccine roll-out is diverting healthcare workers and scarce funding away from routine immunisation, leading to the interruption of child vaccination campaigns.[26]

Health worker Mekdes goes door to door protecting children from polio in Addis Ababa, Ethiopia.

## COUNTRY STUDY: THE DECLINE IN CHILDHOOD IMMUNISATION IN THE PHILIPPINES AND THE IMPACT OF THE COVID-19 VACCINE ROLLOUT

The Philippines has low routine immunisation coverage and is one of the ten countries with the highest number of zero-dose children. Between 2013 and 2015 the routine immunisation coverage rate dropped from 89% to around 62%.[27] Inequalities are driving immunisation rate disparities, with children from the lowest-income households and rural areas being significantly worse-off than children from wealthier and urban households. Even before COVID-19, immunisation rates in the country were declining due to a weak health system (especially insufficient human resources), poor flexibility in vaccination schedules, and supply and distribution challenges. Weak political leadership and governance have compounded the lack of prioritisation and investment in routine immunisation.

The pandemic and COVID-19 vaccines rollout has diverted the already limited number of health care workers, putting extra pressure on frontline workers who are delivering routine immunisation and are now rushing to get as many people vaccinated against COVID-19. **As of December 2021, the Philippines had more than one million zero-dose children, representing almost 50% of the annual birth cohort.**[28] Further disruptions of basic health services and the diversion of community health workers to the rollout are worsening the existing immunisation crisis in the country.

Mum Gennie Oliva holds her child Kivet while a health worker vaccinates them against measles, mumps and rubella in Taguig City, Philippines.

**Failure to maintain adequate childhood vaccination rates caused more deaths from measles than Ebola itself in 2019 in the aftermath of the Ebola outbreak in the Democratic Republic of the Congo.**[29]

## DONOR RELUCTANCE TO FINANCE WHAT'S NEEDED MOST RIGHT NOW

Donor governments have at times been reluctant to finance operational – and therefore less tangible and visible – costs of health, including systems strengthening, vaccine logistics and surveillance. Instead, there is a tendency to prioritise easier-to-measure commodities that can be showcased to demonstrate 'impact', such as the number of vaccines ordered and delivered. But vaccines cannot be administered without people trained and available to deliver them, along with the transport logistics of getting them to where they're needed most.

In addition to the need to retain and expand donor financial support there is a need to protect, restore and increase domestic budgets for immunisation. The fragility of weak health systems and budget deficits for health and immunisation services have been exposed, with continuing gaps that donors cannot fill alone. Urgent attention needs to be drawn to the issue of operational costs and sustainable, ongoing financial support to enable systems to reach every child with vaccines and essential services, and to prepare for future pandemics and global health emergencies. Countries in South East Asia have responded positively to the pandemic by increasing domestic immunisation budgets over the course of the pandemic. This should set a precedent to overcome longstanding budget deficits, fragile health systems and complement donor investments.

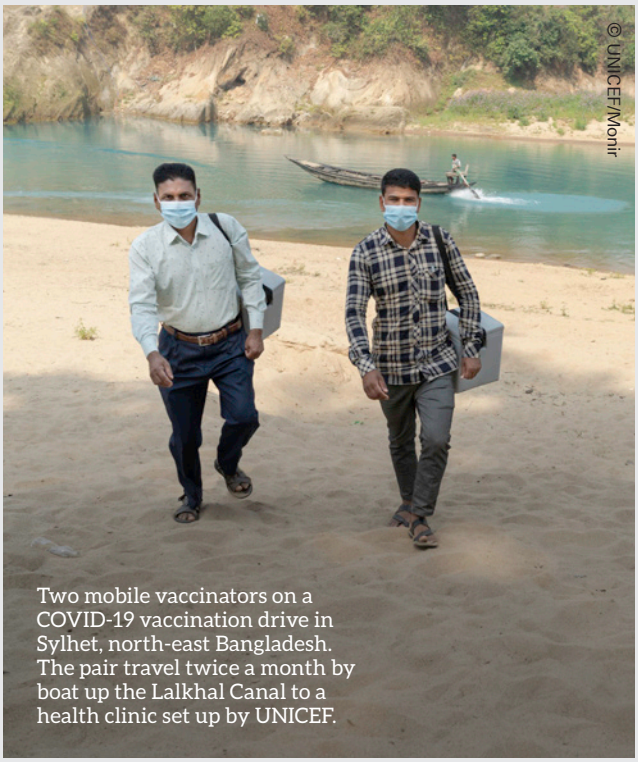

Children in Aden, Yemen, proudly show where they were vaccinated against measles and rubella in a UNICEF-supported campaign.

## COUNTRY STUDY: BANGLADESH IMPLEMENTS MASS MEASLES VACCINATION DRIVE DURING THE PANDEMIC

Measles cases throughout Bangladesh have been steadily rising over the past five years: the incidence rate increased from 1.6 per million people in 2015 to 29 per million in 2019.

With the goal to eliminate measles from the country by 2023, the Bangladesh Government coordinated a six-week nationwide campaign that was initially planned for February 2020 but was delayed by 10 months due to COVID-19. It was eventually implemented in December 2021 and reached 36 million children.

For the first time, the campaign was fully digitised, using e-tools and smartphone applications to develop and deliver online plans and collect monitoring data from the field. This significantly eased pressure on campaign staff and volunteers during a period of strain for the country's health system and helped pave the way for future supplementary immunisation activities and routine services to replicate this technology. [30]




Two mobile vaccinators on a COVID-19 vaccination drive in Sylhet, north-east Bangladesh. The pair travel twice a month by boat up the Lalkhal Canal to a health clinic set up by UNICEF.

## VACCINE HESITANCY AND OUT-OF-POCKET EXPENSES ARE AFFECTING DEMAND

In LMICs, fear of infection – including from healthcare workers – has been one of the main factors affecting access to health services, including immunisation, over the course of the pandemic.[31] In November 2021, UNICEF's Dashboard on tracking the situation of children during COVID-19 indicated that fear of infection was the main reason for not accessing health services in those countries.

**For each COVID-19 death attributable to an infection acquired during a routine vaccination clinic visit, as many as 84 deaths in children could be prevented by sustaining routine childhood immunisation.[32]**

As of November 2021, the WHO reported that only 1 in 4 (or 27%) of health workers in Africa had been fully vaccinated against COVID-19. While the COVID-19 pandemic has highlighted the importance of vaccination as a global public health tool it has also led to a concerning rise in vaccine hesitancy and misinformation in many countries. Issues relating to vaccine demand in the context of COVID-19 vaccination should also mobilise countries to strengthen their risk communication and community engagement (RCCE), relating to demand for all vaccines to ensure healthy vaccine coverage.

While vaccine coverage has largely correlated with supply-side factors such as vaccine availability rather than personal belief or fear over the vaccines, the "infodemic" around COVID-19 vaccines spread by social media has led to growing mistrust of the vaccines that could spill over into attitudes to other routine vaccines, including new vaccines. The WHO's third round of the Pulse survey found that almost 60% of 95 countries reported demand-side challenges, in particular community acceptance and affordability of the vaccine.[33]

## SPOTLIGHT: FINANCING COVID-19 VACCINE DELIVERY AND OPERATIONAL COSTS IS KEY TO PREVENTING DECLINE IN OTHER VACCINATION SERVICES

Fully and independently financing the international COVID-19 pandemic response, including support for the operational costs and ancillary supplies needed for COVID-19 vaccine rollouts, will be imperative for mitigating the risk of vital human and financial resources for other immunisation services being diverted to the delivery of COVID vaccines.

A January 2022 modelling study by UNICEF also found that urgent, independent funding is needed to pay for additional surge capacity and for additional healthcare workers to avoid existing resources being redeployed. UNICEF's COVID-19 vaccine cost estimates incorporate surge capacity to ensure that healthcare workers can continue providing essential services. The study found that to fully protect essential health services, while rolling out COVID-19 vaccines across 133 countries via additional surge capacity, would require a total of $8.4 billion. Balancing COVID-19 vaccine delivery and essential resources would cost $3.2 billion for the 133 countries – although this would lead to a financing gap in over 100 countries.[34]

With support from UK Aid, UNICEF has sourced COVID-19 hygiene supplies, like hand sanitizers and soap, from local suppliers in Ethiopia.

## COUNTRY STUDY: RECOVERING CHILDHOOD IMMUNISATION CAMPAIGNS IN NEPAL[35]

Nepal experienced some of the most severe disruptions to routine immunisation services due to COVID-19. In March 2020, most childhood immunisation services were suspended. Safety concerns led to the cancellation of a measles–rubella vaccination campaign, resulting in measles outbreaks in eight districts: Dhading, Chitwan, Gorkha, Kathmandu, Lalitpur, Jhapa, Morang and Sarlahi. About half of the country's 16,000 immunisation centres stopped operating during the national lockdown, resulting in thousands of children missing out on vital vaccines.

Nepal's Ministry of Health and Population mitigated the impact of COVID-19 on immunisation services by implementing safety protocols and adapting service delivery, including setting up outbreak response immunisation (ORI) centres in the districts affected by measles outbreaks, and increased monitoring of vaccine-preventable diseases, including measles and tetanus. For example, the National Immunization Advisory Committee endorsed the ORI response for the Kathmandu and Dhading cluster outbreaks – supported by the WHO and UNICEF. The ORI response in Kathmandu and Dhading reached 97% of children targeted.[36] The Nepal Government emphasised that children under 15 months should be prioritised for vaccination. The measles–rubella campaign was resumed in May 2020, followed by the introduction of the rotavirus vaccine in early July while the country was still in lockdown. Immunisation invitation cards were delivered to homes which resulted in high demand, with children being brought to ORI centres.

The overwhelming emphasis on speed and an emergency response over deliberate system-strengthening risks missing out on the huge opportunity to focus on long-lasting and sustainable changes that a system-wide approach could bring, including the country's capacity and communities' resilience to deal with future pandemics.

A girl's inked fingernail shows she received her measles-rubella vaccine at an immunisation centre in Kathmandu, Nepal. COVID-19 halted the national vaccination campaign. UNICEF and WHO provided technical support to the Ministry of Health and Population in the development of guidance to resume the campaign in May 2020. The campaign has now successfully completed across Nepal.

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SECTION TWO

# LEVERAGING THE COVID-19 RESPONSE AND VACCINE ROLLOUT TO STRENGTHEN ROUTINE IMMUNISATION

> "The introduction of a new vaccine provides many opportunities, as well as challenges, to improve a country's overall immunization programme as well as its health services and health system. Many of the activities carried out to prepare, implement and monitor the introduction of COVID-19 vaccination will provide opportunities to improve the immunization programme and to identify best practices that could be applied to other health programmes and services."
>
> WHO-UNICEF, Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines[37]

The national rollout of COVID-19 vaccines in LMICs and LICs provides a unique opportunity to increase the capacity of health systems to expand and strengthen routine immunisation, including through the investments needed for the delivery of COVID-19 vaccines such as the creation of public vaccination hubs, training healthcare workers and community-led approaches to tackling vaccine hesitancy and misinformation. The rollout of COVID-19 vaccines requires the strengthening of EPI services, including infrastructure and health workforce capacity, to meet national COVID-19 vaccination targets and increase uptake of routine immunisation services. However, catch-up programmes will not be able to rely solely on the EPI programme and emergency response mechanisms will need to be strengthened to ensure children are protected immediately and prevent a resurgence of disease outbreaks.

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A mobile health team provide COVID-19 vaccines in Sylhet, north-east Bangladesh, supported by UNICEF and UK Aid.

## SPOTLIGHT: PERSPECTIVES ON COVID-19 VACCINE ROLL-OUT AND ROUTINE IMMUNISATION

The Immunisation Peer Learning Programme, led by the Geneva Learning Foundation, collected responses from a group of over 6,000 subnational immunisation professionals between January and February 2022. The findings showed that three-quarters (75.8%) of participants believe that the introduction of the COVID-19 vaccine offers opportunities to strengthen routine immunisation and primary health care services. Only 8.3% said this would not be the case, while 15.8% were unsure.[38]

When asked what about the effects of the COVID-19 vaccination on routine immunisation in their location, responses were fairly evenly split. 36.5% of respondents said COVID-19 vaccination had hurt routine immunisation services, and 31.1% answered that COVID-19 vaccinations helped routine services. 32.4% reported that the COVID-19 vaccination had no impact on routine immunisation.

These findings demonstrate that the overwhelming majority of immunisation stakeholders consulted in the analysis believe the introduction of the COVID-19 vaccine offers opportunities to strengthen routine immunisation services. However, despite the widely held belief of these stakeholders, evidence to date strongly suggests that the rollout of COVID-19 vaccines has been, for at least a third of respondents, more damaging rather than beneficial to routine immunisation services. The data suggests urgent interventions are needed to better understand the dynamics of COVID-19 vaccinations in countries and to ensure that the introduction fulfils the potential to strengthen access to routine immunisation.

A Community Health Nurse at the Kalpholine Clinic in Tamale, northern Ghana, prepares for her routine immunisation visits. UNICEF Ghana has been supporting the Ministry of Health and the Ghana Health Service to ensure that services such as routine immunisation and child welfare support can continue in the COVID-19 pandemic.

## Key areas in which the introduction of new interventions to support COVID-19 vaccine rollouts could greatly benefit routine immunisation services include:

### 1. Digitalisation of information systems

such as Electronic Immunisation Registries (EIRs) for tracking vaccines and monitoring vaccinations, including vaccine delivery and vaccinated individuals, identifying key populations, notifying people to return for second doses, monitoring vaccine safety and reporting adverse reactions. These digital immunisation systems have largely been deployed for COVID-19 vaccines but can also be used for routine immunisations, especially as many LMICs and LICs lack digital systems for adult immunisations[39] and are facing widespread gaps in data quality, reporting, and patient identification. These new digital platforms could also benefit vaccination catch-up efforts and the targeting of zero-dose children, missed communities and high-risk populations.

### 2. Strengthening supply and cold chains

Supply chain issues remain one of the bottlenecks of childhood immunisation. Common challenges include outdated equipment, weak distribution systems, staff capacity gaps, poor coordination on the ground, and insufficient data and a lack of thorough evaluations to deliver improvement and expansion plans.[40]

In mid-2021, global demand for syringes was outstripping supply, leading to a dangerous shortage of syringes for COVID-19 vaccines and routine immunisation services.

A health worker vaccinates a woman against COVID-19 at a UNICEF-supported vaccination programme in Sylhet, north-east Bangladesh.

To address the crisis, UNICEF rapidly increased syringe procurement, with volume increasing fourfold for routine immunisation and the COVID-19 response, compared to an average year.[41] UNICEF and COVAX partners delivered 845.7 million syringes to 92 countries in 2021 and have secured over 3 billion more for 2022 for both COVID-19 vaccination and routine immunisation needs.[42]

### 3. Expansion of facilities and sites for vaccine administration, including

using community-based facilities such as pharmacies that often represent the first point of contact for people's engagement with healthcare systems in remote and rural areas.[43] Although underutilised, there is evidence that the number of vaccinated individuals in the community increases when pharmacists are empowered to provide immunisation.[44] To meet the requirements of mass vaccinations, COVID-19 vaccine rollouts have also required the set-up of short-term vaccination centres, the requisition of schools and other alternative sites, which have enabled people to get vaccinated without having to travel long-distances. This approach should be taken forward for routine immunisation.

### 4. Use of mass social media and digital tools:

Tools used to tackle COVID-19 vaccine misinformation must continue to be used for routine immunisation, particularly to generate demand for both childhood and adult vaccinations. The pandemic led to the increased use and reliance on social media and other digital communications for information on COVID-19, as well as broader health promotion messages. In the Democratic Republic of Congo, which is one of the least vaccinated countries against COVID-19, the Ministry of Health, together with UNICEF and Gavi, has launched an SMS pre-registration system for COVID-19 vaccination. In collaboration with mobile network operators, SMS blasts were sent out across three telecom networks to 16 million people in the 15 priority provinces, encouraging them to register. In less than three weeks, over 178,000 accessed the platform with 51,000 registered for vaccination.[45]

## SPOTLIGHT: COMMUNITY HEALTH WORKERS ARE KEY TO DELIVERING COVID-19 VACCINES AND MAINTAINING ROUTINE IMMUNISATION

While the pandemic has highlighted the pivotal role of community health workers (CHWs) in maintaining the delivery of essential services as well as COVID-19 related services to the hardest to reach communities, they remain underfunded and under-prioritised in health financing. And their critical role in health systems is often overlooked. CHWs are often not integrated within national health care systems. **Only 14% of CHWs in Africa receive a salary.**[46] Salaries, surge capacity, as well as capacity building, including for communication skills, are essential to tackling vaccine hesitancy and increasing demand.

UNICEF recognises that frontline health workers, including CHWs and facility-based vaccinators, are crucial to the success of immunisation programmes and operate as the interface between supply and demand. UNICEF supports countries to develop workforce capacity, strengthen performance support to equip frontline health workers with essential skills and motivate them through performance recognition systems. This work supports UNICEF's wider efforts to strengthen community health systems that seek to formally integrate community health workers.

## MALARIA: OPPORTUNITIES PROVIDED BY PROGRESS IN VACCINE RESEARCH, DEVELOPMENT AND MANUFACTURING

**In March 2022 the UK Government co-hosted the Global Pandemic Preparedness Summit that focused on cutting down the development time for new vaccines to 100 days.**[47] UNICEF UK welcomed the UK Government's commitment to expanding vaccine development and geographic manufacturing capacity. The commitment represents an important stepping-stone to rapidly developing new vaccines to respond to future pandemics and could, in turn, lead to more countries being able to manufacture life-saving vaccines for children

Developments in vaccine science point to a positive future for malaria control, with the widescale use of the RTS,S/AS01 (RTS,S) vaccine in Sub-Saharan Africa and other regions of the world being recommended by the WHO.[48] Additionally, a different vaccine candidate developed by Oxford University has shown 77% efficacy in Phase 2 trials in 2021, becoming the first vaccine candidate to reach the WHO target of 75% efficacy.[49] The rollout of RTS,S and the emergence of new malaria vaccine candidates has the potential to drastically reduce the number of child deaths provided that vaccination systems are strong enough to deliver.

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A girl in Mauritania protects herself from malaria with a treated mosquito net. In 2020, UNICEF and partners provided more than 1.6 million nets for Mauritania.

## IMMUNISATION AS A GATEWAY FOR STRENGTHENING SERVICES DELIVERY FOR CHILDREN

Immunisation is widely recognised as one of the most cost-effective public health interventions, but it is also an entry point for providing other essential health services to children and their families including nutrition, neonatal and maternal healthcare, malaria prevention, and water, sanitation and hygiene. The first couple of years of a child's life are especially critical for health and development, so vaccinations and boosters need to take place regularly. The lack of widescale adult vaccination programmes also creates a challenge for reaching the most marginalised and hardest-to-reach populations, which child immunisation can help mitigate.

## AN OPPORTUNITY FOR INTEGRATION

Integrated approaches are key to improving the delivery of other essential services, and immunisation is a key driver to strengthening primary health care and building more resilient health systems. Yet, the incredible benefits for children and their families of integrating essential health services within immunisation programmes – including reduced mortality, better use of scarce healthcare resources, and greater reach – are not being fulfilled.

While immunisation has been used to implement other essential services including vitamin A supplements and insecticide-treated mosquito nets,[50] vertical approaches to healthcare delivery continue to dominate programming and funding. Immunisation activities are largely carried out through vaccination campaigns and other outreach activities, such as vaccination weeks, which boost coverage at specific times and help reduce geographical inequalities. However, they also compound uneven coverage, people not getting all recommended doses of some multi-dose vaccines, and delays in vaccinations recommended to be administered at specific ages.[51]

Baby Hanna, just 15 days old, receives her polio vaccine in Addis Ababa, Ethiopia.

## COUNTRY STUDY: INTEGRATION OF WATER, SANITATION AND HYGIENE INTO IMMUNISATION SERVICES IN NEPAL

WaterAid and the London School of Hygiene and Tropical Medicine (LSHTM) conducted a pilot study to assess the feasibility of integrating hygiene behaviour change into Nepal's national immunisation programme. The intervention improved key behaviours (related to exclusive breastfeeding, handwashing with soap, food hygiene, faeces management, and water and milk treatment).

The pilot was implemented in four districts between February 2016 and March 2017. Around 35,000 mothers and carers of infants were targeted at least five times while attending a vaccination visit. In just one year, all key hygiene behaviours increased from 2% (baseline) before the pilot to 53%, and immunisation coverage also increased, leading to a 10% reduction in the prevalence of diarrhoea.

The integration of hygiene promotion with routine immunisation was expanded nationwide in July 2020 to coincide with the introduction of the rotavirus vaccine into the existing national immunisation programme during the COVID-19 pandemic. As part of the COVID-19 response, the government leveraged the existing national scale and ongoing 'Hygiene promotion into immunisation programmes' initiative to disseminate COVID-19 preventative behaviours quickly and at scale by integrating these into the existing campaign.[52] UNICEF is collaborating with the Department of Health Services to establish hand washing facilities in the immunisation session sites for hygiene promotion in routine immunisation.

Mother and child receive their health and vaccination services at Banlekh Health Post, western Nepal.

# UK COMMITTEE FOR UNICEF RECOMMENDATIONS TO THE UK GOVERNMENT

**To seize the opportunity to strengthen health systems and protect children from vaccine-preventable diseases, this report recommends that the UK Government:**

1. Ensure that addressing declines in routine immunisation and promoting increased uptake of routine immunisation services is a key priority for action at global political and public health platforms in 2022 and beyond, including the G7, G20 and World Health Assembly.

2. Operationalise the FCDO health systems' strengthening strategy and ensure that maintaining and strengthening routine immunisation services is prioritised.

3. Honour pre-existing commitments to immunisation partners including Gavi 5.0, the Global Polio Eradication Initiative (GPEI), bilateral programming and the WHO Essential Programme on Immunisation and UNICEF.

4. Provide £1 billion in additional support to Access to COVID Tools Accelerator (ACT-A) partners and in-country delivery costs for the international COVID-19 response in 2022, ensuring that COVID-19 vaccine delivery and operational costs are fully financed. The UK should also ensure that all financial support for the global COVID-19 response is additional to the 0.5% of GNI ODA budget, and not at the expense of existing commitments to global health and other essential services.

5. Use their governing role on global health multilateral boards to ensure core focus and core funding is maintained on reaching zero-dose children, equitable vaccination and polio eradication. The governance role must also be utilised to ensure cohesive approaches among global and immunisation actors to strengthen immunisation systems and balance the delivery of COVID-19 vaccination and routine immunisation services to prevent further disruption to childhood vaccination.

6. Build on its leadership in hosting the 2022 Global Pandemic Preparedness Summit by working with global health stakeholders to prioritise strengthening vaccination systems and committing to leading efforts to strengthen global health security by ensuring these systems are suitable to deliver new vaccines for future emergencies, while sustaining and increasing the uptake of new and existing childhood vaccines.

# CONCLUSION

## Routine immunisation services are an extremely effective child health intervention and must be a financial priority for the UK Government.

The challenges facing routine immunisation in the context of COVID-19 are significant. But the response to the pandemic provides a catalyst to strengthen immunisation systems and prevent the adverse effects of the pandemic on routine immunisation, essential primary health care services, and children's lives. It can be a critical pathway to overcome existing barriers and protect children's right to receive life-saving vaccines.

First, the COVID-19 pandemic has demonstrated the importance of vaccination as an essential and effective public health tool and showcased the importance of having strong immunisation services and the need to drastically strengthen EPI. The infrastructure and resources required to support the delivery of COVID-19 vaccines, including the creation of public vaccination hubs, digital information systems, strengthening of supply and cold chains, and efforts to tackle vaccine hesitancy and misinformation offer unique opportunities to revamp immunisation systems.

Second, while the pandemic has shown that many countries have faced significant challenges to deliver the COVID-19 response and maintain essential health services, immunisation is proven to be a crucial entry point for the effective and more equitable delivery of primary health care services for children, which has been severely affected by COVID-19.

Third, donors' commitment to strengthen and accelerate vaccine research and development, and the geographic expansion of manufacturing, offers an opportunity to improve broader vaccination systems, equipping them with the resources and infrastructure they need to withstand future pandemics and deliver new vaccines efficiently, without compromising existing routine immunisation services.

Amid ongoing global health challenges, routine immunisation services are an extremely effective child health intervention and must be a financial priority for the UK Government. This will require the UK Government's existing global health commitments to be maintained, renewed financial commitments for immunisation multilaterals in the coming years, and ensuring that delivery and operational costs for the COVID-19 response are fully and independently financed.


Two girls from Aden, Yemen, show they have been vaccinated against polio. UNICEF supported the campaign in 12 Yemeni governorates, targeting nearly 2.5 million children aged 10 and under.

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Front cover

A child receives routine vaccines at Nawabad Health Facilities in Herat, western Afghanistan. UNICEF provides and supports routine vaccines for children in Afghanistan.



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