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### Prevent, Protect, Prosper

In 2000, when Gavi, the Vaccine Alliance was established, around 10 million children died before reaching their fifth birthday. By 2017, this number had almost halved. This is a staggering change in under two decades, especially as the number of children born each year in lower-income countries has increased by 10% – and in Africa by nearly 40% – over the same period. Several investments have contributed to this hugely significant improvement in life chances but few more so than vaccination.

Improved access to vaccines has changed the lives of millions of people in low-income countries. Since its inception, Gavi has protected a whole generation of children, 760 million of them, from potentially fatal infectious diseases.<sup>iii</sup>

Gavi's support for an expanding portfolio of vaccines has been a major factor in reducing the number of deaths due to vaccine-preventable diseases by as much as 70% since 2000. The introduction of the rotavirus vaccine has emptied wards that used to be full of children suffering from acute and potentially fatal diarrhoea. New pneumonia vaccines are tackling one of the largest killers of children and preventing the spread of antimicrobial resistance (AMR). The debilitating and visible effects of poliomyelitis are being confined to the history books, and the roll out of the human papillomavirus (HPV) vaccine means that protecting generations of adolescent girls from cervical cancer is within our grasp.

The past 18 years have also seen a narrowing in the gap in life chances between the rich and poor. Gavi's work with its ever-widening circle of partners is reducing inequity: more and more children born to low-income families are being given the opportunity to a have healthy start in life.

Although the world is a significantly healthier, safer and more prosperous one than it was when Gavi was established, these gains are fragile. Too many children are still missing out on the benefits of vaccination. While the goal of "leaving no one behind" is closer at hand than ever before, because of emerging threats, now is the time to intensify our efforts to bank the gains made to date and to make further progress.

The cumulative effects of population growth and displacement, climate change and increasing fragility, coupled with those of recurrent disease outbreaks, are threatening these hard-won gains. Now is not the time for complacency but for renewed commitment to help countries to continue to prevent disease, protect their communities and, above all, to prosper.

Population growth is but one of several reasons why our vaccine coverage targets are coming under threat. While the total number of children immunised with three doses of diphtheria-tetanus-pertussis (DTP3)¹ vaccine increased by 4% in 2018 (compared with 2015), this only resulted in a 1% increase in coverage.vi The human cost is unacceptable; each year 1.5 million people die from vaccine-preventable diseases.vii These deaths are entirely avoidable.

Reaching those hard-to-reach communities that are still missing out on vaccination remains a huge challenge, one that is made more difficult by the pressures caused by conflict, country fragility and migration. Whether people are on the move because of climate change, war or urbanisation, or because they are part of nomadic communities, the result is the same. The congregation of large groups of displaced people, often underimmunised or even unimmunised, in cramped and crowded conditions creates the ideal conditions for outbreaks of dangerous diseases – diseases which can incubate and spread with alarming speed.

An urgent response is needed. Now is the time to double down on reaching these communities with immunisation in order to continue to advance Gavi's hard-won gains.

"More than 140 million children are born into the world every year, each one of them requires domestic and international investment to provide the protection of vaccines if we aspire to make our world safe, unburden families from preventable disease, and enable the next generation to thrive in life."

**Dr Ngozi Okonjo-Iweala**Board Chair, Gavi, the Vaccine Alliance

In its next strategic period, 2021–2025, Gavi will support the roll-out of the most comprehensive package of protection to the world's poorest countries in the Alliance's history. With countries squarely in the driving seat, Gavi will help foster long-term sustainability and vaccine supply security through its unique transition model and market shaping efforts.

Marginalised communities without access to vaccination are home to most of the world's "zero-dose" children, two thirds of whom live below the poverty line. These communities are also less likely to have access to other basic health services and information. Gavi will put the last mile first and entrench its focus on tackling low coverage and inequity in immunisation by leveraging the power of vaccines and targeted health system strengthening investments, to help put in place the platform needed to deliver equity-driven primary health care services at both national and subnational levels. This will make a significant contribution to the realisation of the Sustainable Development Goals (SDGs), notably SDG3.

The same communities who are unable to access regular prevention are also the ones most likely to be at the epicentre of deadly epidemics and pandemics of infectious disease. Such outbreaks not only risk jeopardising the achievements of national routine immunisation programmes but also, given the enormous increase in human mobility, threaten global health security. Gavi will help protect the world against disease outbreaks by supporting both routine immunisation – the best shield against epidemics – and frontline defence with emergency stockpiles, as well as contribute to a world free of polio.

Beyond being a major contributor to the SDG3 aspiration of healthy lives and promotion of well-being for all, immunisation is an essential ingredient for most other SDGs<sup>2</sup>. Immunised communities will be healthier and better educated, household economics will be bolstered and the next generation, both boys and girls, will grow up to become more productive members of society. While girls and boys have equal access to vaccination globally, gender barriers faced by their mothers or caregivers affects their chances of being immunised. A gender-focused approach to vaccination programmes will further ensure that men and women become active agents in their children's immunisation.

Investments in prevention and protection will lead to prosperity. With each US\$ 1 of investment in immunisation, a return of US\$ 54 in broader societal benefits will be achieved.\*

Our work together – leveraging donor financing, empowering countries, shaping sustainable markets – will allow us to achieve the Alliance's goals and reach a further 300 million children between 2021 and 2025 and, through the full protection of the broadest vaccine portfolio in history, save an additional 7–8 million lives.\*

With your support, this ambitious programme is realistic and within reach. Without your support, however, we run the risk of losing the momentum of our hard-fought gains and even backsliding.

The next strategic period will be a critical one for Gavi and represents a turning point in our history. Much of the hard work has been done, and for many countries the building blocks for sustainable immunisation are already in place. What is needed now is fresh thinking and innovative technologies to tackle the challenges that are preventing vaccines from reaching the remaining unimmunised children. By working together, and with enough support, we can achieve more impact, more efficiently and at a lower cost to donors than ever before.

### Prevent, protect, prosper:

in order to deliver on its ambitious plans, Gavi will need at least **US\$ 7.4 billion in additional resources** for the period 2021–2025.

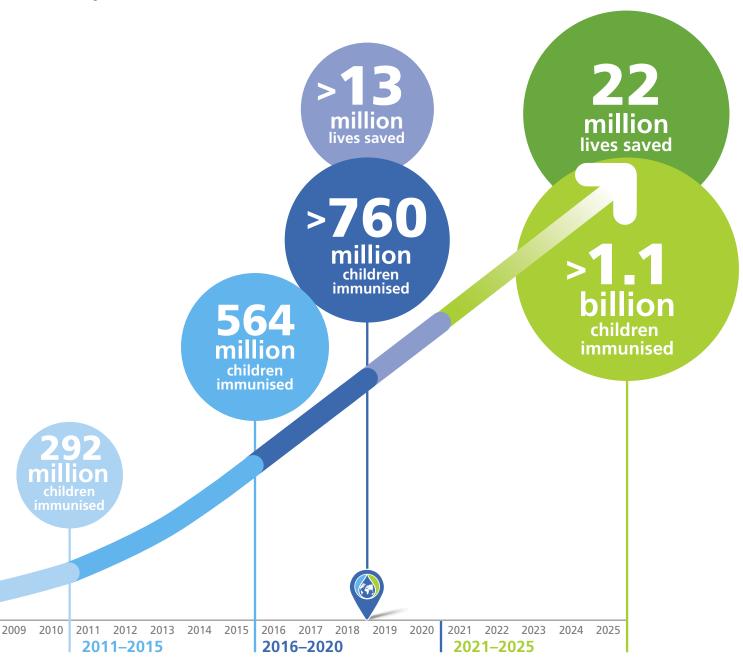
children munised 95 million 2000 2001 2002 2003 2004 2005 2006 2007 2008 2000–2005 2006–2010

### IN 2021-2025, GAVI WILL:

- → Empower countries to take on vaccine financing and ensure the successful transition of a further 10 countries into self-financing.xii
- → Catalyse country contributions of **US\$ 3.6 billion** in domestic co-financing and self-funded vaccine programmes.xiii
- → Continue to engage the 18 countries that have already transitioned out of Gavi support through targeted activities to sustain progress.
- → Contribute to a further **US\$ 80–100 billion** in economic benefits.xiv
- → Enhance the competitiveness and supply security of at least **five Gavi-supported vaccine markets.**\*\*

- → Deliver over **3.2 billion doses** of life-saving vaccines to **55 eligible countries**.<sup>xvi</sup>
- → Facilitate **1.4 billion** touchpoints between families and health services through vaccination. \*\*vii
- → Insure the world against polio re-emergence through implementing routine **inactivated polio vaccine (IPV)** programmes across Gavi countries, in collaboration with the Global Polio Eradication Initiative (GPEI).
- → Fund vaccine stockpiles for emergency use to **stop** dangerous outbreaks.

### > Figure 1 CUMULATIVE VACCINATION AND LIVES SAVED BY 2025



### Purposeful collaboration

Collaboration is at the heart of the Gavi model. The Vaccine Alliance has substantially increased its membership and partner base. More recently, Gavi has joined with key actors in global health in shaping WHO's Global Action Plan for Healthy Lives and Well-being for All in a bid to help foster a new era of global collaboration.

Created in 2000, Gavi is a public-private partnership representing all stakeholders in global immunisation. Gavi's model incorporates the leadership of implementing countries; the technical skills of the United Nations Children's Fund (UNICEF), the World Health Organization (WHO), the World Bank, the United States Centers for Disease Control and Prevention (CDC) and research agencies; the research and production capabilities of vaccine manufacturers; the know-how and support of the private sector, donor governments and the Bill & Melinda Gates Foundation; and the immunisation delivery and advocacy skills of civil society organisations around the world. Gavi has also engaged a community of partners from the public, private and social sectors who bring specialised expertise and cultivate life-changing innovations at scale.

The Alliance's model is driven by implementing countries which co-finance vaccines, investing domestic resources to ensure their communities are immunised. The other Alliance partners provide technical, operational and advocacy support.

Partnership with civil society organisations (CSOs) helps to reinforce political commitment to immunisation at the national level. Through their connections to communities, many CSOs are uniquely placed to help identify and overcome barriers to immunisation, mobilise demand for vaccines and assist with vaccine confidence, deliver services to the most vulnerable and bring the voices of those communities to shape national decision-making and accountability.

Each Alliance partner brings their unique area of expertise to support Gavi's mission to leave no one behind with immunisation. The Gavi Secretariat, based in Geneva and Washington, DC, coordinates the activities of Alliance partners and ensures these are funded, monitored and evaluated, as well as ensuring accountability. A defining feature of Gavi's model is its ability to be flexible and adapt to changing circumstances and contexts, and to leverage the unique abilities of its partners.

The Gavi Board, representing the primary stakeholders in immunisation, deliberates and decides on the strategies, policies and approaches required to deliver on the Gavi mandate.

The result of this is an immunisation platform operating at scale, providing access to vaccines for around half of the world's newborns, with lower overheads and greater efficiencies of scale than could be achieved by immunisation actors or donors operating independently.

Unprecedented success has been achieved by Gavi over two decades. The Alliance has demonstrated the power of partnership and collaboration to achieve more than the sum of its parts.

Driven by countries, Gavi's collaborative model will continue to expand moving forward. The Vaccine Alliance's inclusive approach will further engage communities and civil society, and promote a growing ecosystem of public, private and social sector partners, bringing expertise and capacity to address countries' self-identified needs.

The Alliance has demonstrated the power of partnership and collaboration to achieve more than the sum of its parts.



Gavi/2009/Olivier Asse

In October 2018, Gavi joined other global health and development organisations and signed a landmark commitment to make collaboration across the leading agencies in global health more deliberate and systematic. Coordinated by the WHO, the Global Action Plan for Healthy Lives and Well-being for All (GAP) aims to accelerate progress towards achieving the health-related Sustainable Development Goals (SDGs).

Through this work, the Alliance is playing a leading role in helping shape concrete outcomes that will further strengthen collaboration across 12 key multilateral agencies. Gavi, together with the World Bank and the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund), is co-leading the GAP accelerator on sustainable finance, helping to identify ways to work better together to ensure countries can rapidly improve the mobilisation allocation, and use of funds for health.

The Alliance's contribution to this plan is anchored in Gavi's commitment to partnership for a purpose, a vision that lies at the heart of the Gavi model.

Gavi is already working closely with the Global Fund in countries and across a range of areas, from addressing critical health systems challenges (such as data and supply chains) to financing malaria pilots (with Unitaid). Collaboration is further strengthened now that both partners share headquarters at the Global Health Campus in Geneva, Switzerland.

Partnership for a purpose also extends to the recently created Global Financing Facility (GFF), with Gavi taking part in its "Investors Group" to ensure alignment on tackling the challenge of the more than 5 million maternal, newborn and child deaths that are still occurring each year, principally among the world's poorest people. Gavi, the Global Fund, the World Bank and the GFF are working to coordinate their dialogue with countries and align their financing behind countries' primary health care priorities.

Gavi and GPEI have unique and complementary roles and are working closely together to ensure all children have access to life-saving vaccines and facilitate the achievement of a polio-free world. Collaboration goes back to 2006, when Gavi supported oral polio vaccine stockpile financing prior to working together to rollout IPV. As GPEI approaches its polio eradication goal and lays the groundwork for the post-certification era, Gavi and GPEI have deepened their collaboration even further.

"We cannot achieve health for all without vaccines for all."

Dr Tedros Adhanom Ghebreyesus

Director-General,

World Health Organization

"UNICEF is proud to be part of Gavi, the Vaccine Alliance. Together we are bridging the gap between lifesaving vaccines and the millions of children who need them. Our collective work is making primary health care systems stronger as we create platforms and community networks to deliver vaccinations and other vital health and nutrition services. These are essential steps towards realising the promise of universal health coverage. We cannot risk losing the hard-won gains we have made in immunisation, recognised as one of the most cost-effective public health interventions. We must not allow complacency – or the remaining barriers to access, affordability and availability – to threaten the results we have achieved. The time has come to build on our progress, leverage innovation and partnerships, and go the last mile in reaching every child with vaccines."

Henrietta H. Fore Executive Director, UNICEF

### Powered by country leadership

### Recognising the enormous value vaccines bring, countries are scaling their commitment and increasingly leveraging Gavi investments.

Governments worldwide are increasingly recognising the importance of primary health care, as shown by the global commitment made at the Astana Conference in 2018. This is the platform to achieve universal health coverage (UHC) and a signal of the growing commitment to, and financing for, immunisation.

Across the African continent, immunisation is becoming a prominent issue on political agendas. In 2017, African Heads of State endorsed the Addis Declaration on Immunisation, reaffirming their commitment to reach all children with life-saving vaccines as well as increasing and sustaining their domestic investments in immunisation. Two years later, there has been further momentum and political commitment through the "Investing in Health" meeting in Addis Ababa.

With its pioneering transition model, the Alliance has been supporting greater **country ownership of national immunisation programmes**. Gavi's model is a unique approach to sustainability and domestic resource mobilisation for vaccines, and has been highly successful in driving country financing towards immunisation. In the 2016–2020 period, intensified dialogue, particularly between ministers of finance and ministers of health, has translated into countries allocating more domestic resources to immunisation and meeting their co-financing obligations. **It is estimated that countries will invest around US\$ 6.3 billion in immunisation service delivery costs during 2021–2025, in addition to co-financed and self-financed vaccine costs.<sup>xviii</sup>** 

Gavi's experience in working with countries has underlined the need for strong political commitment to lay financial and programmatic foundations for sustainable immunisation systems. A stronger focus on programmatic sustainability will guide Gavi's investments and complement the existing focus on financial sustainability.

Political leaders are listening to the need to allocate resources to primary health care and prevention. At national level, finance and health ministers recognise the immediate return on investments in immunisation.

In large, federated countries, provincial administrative leadership is becoming increasingly critical, as Gavi seeks to catalyse improvements in immunisation systems at subnational levels and invest in areas of low immunisation coverage.

Moving forward, Gavi's work with governments, will help move the needle, from ensuring co-financing to driving long-term, country-driven sustainability.

A stronger focus on programmatic sustainability will guide Gavi's investments and complement the existing focus on financial sustainability.

By the end of the current strategic period, countries supported by Gavi will have invested US\$ 1.6 billion in co-financing and self-funded vaccine programmes.xix During 2021–2025, these countries will contribute US\$ 3.6 billion – more than double the amount for the previous five-year strategic period.3



Gavi/2013/Christ Stowers



Gavi's dialogue with governments has also facilitated earlier planning for a sustainable transition out of Gavi support. Driven by catalytic support, 15 countries have already transitioned and are self-financing 33 vaccine programmes introduced with Gavi support. An additional 3 countries are expected to transition by the end of 2020. Among the 15 countries that have transitioned, all have maintained vaccination coverage of above 90% or at a similar level to the previous year.\*x

Gavi will continue its work on successful transition. A further 10 countries are expected to transition out of Gavi support in 2021–2025, bringing the total number of transitioned countries to 28, or almost 40% of the original portfolio of 73 countries. Lessons learned in the previous period will be applied to build on success.

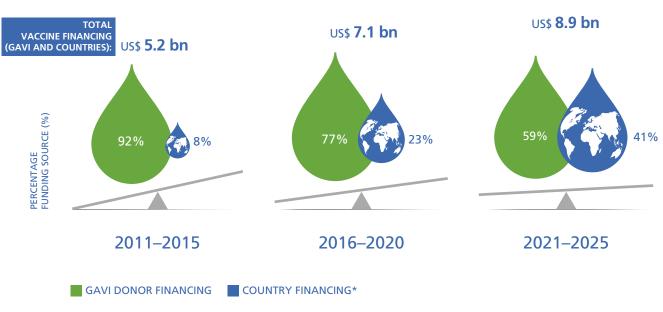
"This is the time for the global community to rally and support Gavi on its mission to protect all people, everywhere from vaccine-preventable diseases."

Carlos Agostinho do Rosário Prime Minister of Mozambique While most countries transition from Gavi support with high coverage and strong financing performance, they still have specific, clearly defined challenges, many of which are linked to their institutional development. These challenges include gaps in programme management and regulatory capacity, inefficient vaccine procurement practices and some missed vaccine introductions. To address these gaps and minimise any risks of backsliding, the Gavi Board has recognised the importance of putting in place an engagement approach with countries post-transition, focused on political advocacy, targeted technical assistance, innovation, market shaping and catalytic short-term financial support to jump-start new vaccine introductions. This will ultimately catalyse the more efficient and effective use of countries' own domestic resources allocated to immunisation.

### WITH YOUR SUPPORT, COUNTRIES WILL:

- → Contribute US\$ 3.6 billion in co-financing and self-financing vaccine costs.
- → Sustainably transition out of Gavi's financial support, with **10 additional countries** doing so by 2025.
- → Build on momentum towards further **domestic** resource mobilisation.

### > Figure 2 LEVERAGING COUNTRY FINANCING FOR GAVI-SUPPORTED VACCINES



<sup>\*</sup> Includes co-financing, self-financing and India



### Raise the next healthy generation

### The Vaccine Alliance model is being further leveraged to provide the most comprehensive portfolio of life-saving vaccines ever.

In 2021–2025, the Alliance will address inequities and provide the most comprehensive package of life-saving vaccines to Gavi-supported countries. Equity will be at the heart of the agenda to ensure that services are extended as a priority to communities that are currently missing out.

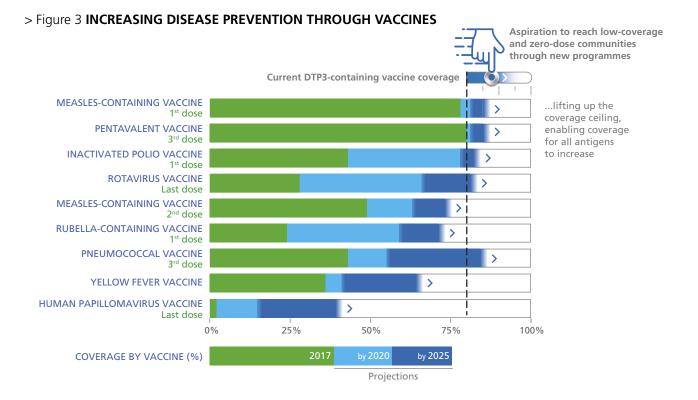
Gavi will continue to increase the reach of pentavalent, pneumococcal and rotavirus vaccines, preventing the deaths of millions of children from the most widespread childhood killers.

HPV is Gavi's most powerful vaccine and country demand – from a standing start in 2011 – is now far in excess of supply. This demand could translate into 84 million girls vaccinated and 1.4 million future deaths averted, if vaccine manufacturers were able to increase production. Regrettably Gavi believes that supply constraints will mean that only 50 million girls can be immunised with the HPV vaccine in the next period, far less than those who could be immunised if there was an unconstrained supply.\*\* Working actively with vaccine suppliers, Gavi will accelerate the roll out of the HPV vaccine to girls and adolescents, which protects against 70–90% of cervical cancer cases, now the leading cancer killer of women in Africa.

This also provides an opportunity to engage with a critical age group, in collaboration with partners, to provide an integrated package of information and services beyond the HPV vaccine.

Gavi will continue to expand its portfolio of vaccines and breadth of protection, providing protection against 18 diseases in the next period compared with just 6 in 2000 (see Figures 3 and 4).<sup>4</sup> **The introduction of new vaccines to Gavi's portfolio**, including diphtheria-tetanus-pertussis (DTP) boosters; hepatitis B birth dose; multivalent meningococcal<sup>5</sup>; routine oral cholera vaccine; respiratory syncytial virus (RSV)<sup>5</sup> and rabies will help to protect people across the life course. Gavi's support for a comprehensive package of vaccines will mean that delivery systems are in place at different points through the life course. For example, reaching children at the age they go to school could support the roll-out of potential new blockbuster vaccines such as an HIV vaccine, as and when they become available.

The Alliance will address inequities and provide the most comprehensive package of life-saving vaccines.



The continued scale-up and introduction of vaccines, particularly pneumococcal, rotavirus, typhoid and meningococcal vaccines, will contribute to combatting AMR by preventing illness and the use of antibiotics.

The Alliance will work with countries to prioritise Gavi support, continuing the vaccine introduction agenda while assisting countries to identify vaccines that are most appropriate for their context.

This extensive portfolio of vaccines to prevent debilitating and life-threatening diseases will be delivered through a sustainable supplier base at an affordable cost; an enabling support architecture, with Alliance partners; and a suite of transformational innovations, provided by public and private actors curated by Gavi from around the world.

### WITH YOUR SUPPORT, WE WILL:

- Reach over **300 million more children** with vaccines, saving 7-8 million lives that would otherwise be lost.
- → Accelerate the roll-out of the **HPV vaccine to girls** that protects against up to 70–90% of cervical cancer cases
- → Provide the most comprehensive package of vaccination to Gavi-supported countries to protect against 18 diseases.

### > Figure 4 FORECASTED COSTS AND ESTIMATED FUTURE DEATHS AVERTED, BY VACCINE

	2016–2020			2021–2025		
VACCINE	Expenditure in US\$ millions	Number immunised	Deaths averted	Expenditure in US\$ millions	Number immunised	Deaths averted
Pneumococcal	2,402	190m	500k	1,304	280m	~700k
Rotavirus	668	140m	90k	558	220m	~150k
Pentavalent <sup>a</sup>	544	310m	3.5m	348	210m	~2.8m
IPV <sup>b</sup>	495	210m		800	190m	-
Measles and rubella b	376	690m	1.7m	294	490m	~1.4m
HPV b,c	206	14m	300k	516	50m	~950k
Typhoid <sup>d</sup>	41	40m	20k	302	250m	~150k
Yellow Fever <sup>b</sup>	263	150m	650k	424	240m	~700k
Meningitis A <sup>b</sup>	169	140m	150k	115	80m	~100k
Japanese encephalitis b	9	19m	8k		13m	~5k
Ebola	20	140m		150		-
Cholera e	133	19m		32		-
VIS vaccines f	46			360	180m	~40–90k
Other <sup>g</sup>	39			55		-
CEPI outbreak vaccines h	77			0		-
TOTAL	5.5 billion		~7 million	5.3 billion		7–8 million
			original forecast: 5–6 million			

The forecasted impact numbers are a function of current estimates of population size, disease burden and forecasted introductions, scale up and coverage rates and thus are subject to chang

The above estimates exclude the impact of Gavi's planned engagement in former and never Gavi countries. Preliminary analyses suggests Gavi's maximum impact would be ~100k deaths averted.

There are no forecasted values for number immunised or deaths averted for stockpiled vaccines as the occurrence of outbreaks is highly unpredictable

Expenditures based on financial projections as of June 2019

a Includes all hepatitis B- and Hib- containing vaccines.
b Includes estimates from both campaign and routine immunisation strategies.
c Due to uncertainties in future supply of HPV vaccines, in addition to the base case, a range was calculated reflecting different supply scenarios – for number immunised the range is 26m – 71m for 2021–2025 period and the associated deaths averted are 582k – 1.1m.
d Due to uncertainties in future country roll-outs, a range was calculated based on different adoption scenarios in addition to the base case, for numbers immunised the range is 145m – 320m for 2021–2025 period and the associated deaths averted are 100k – 220k.
e Cholera stockpile only 2021–2025 and preventive use bridge funding 2019. VIS vaccines include estimated expenditures for preventive cholera country needs.
f VIS vaccines include diphtheria, tetanus, pertussis-containing (DTP) boosters, hepatitis B birth dose, preventive cholera, rollaysis, meningitis multivalent conjugate, and respira-

preventive cholera, rabies post-exposure prophylaxis, meningitis multivalent conjugate, and respira-tory syncytial virus vaccines (RSV). Range provided for death averted estimates to account for mod-el uncertainty and uncertainty around uptake, with the ranges representing model estimates from two different models for each disease. These numbers are consistent with what was presented to the Gavi Board in November 2018. g Other vaccine related expenditure, for example injection safety support (INS).

h Gavi support to the Coalition for Epidemic Preparedness Innovations (CEPI) is backed by Norway's pledge to IFFIm and is therefore cost-neutral to Gavi. CEPI provides financing for late- stage research and development into new vaccines for vaccine-preventable diseases of epidemic proportions for which no vaccines are currently available.

### Strengthen and extend primary health care systems

The Vaccine Alliance supports countries both to procure vaccines and to build the systems which deliver them.

Routine immunisation already reaches more than four out of every five children in Gavisupported countries, more than any other routine health service.xxiii

Each year, routine immunisation programmes in these countries deliver over 750 million doses of vaccines<sup>6</sup> to over 65 million children.xxiii This requires a trusted and strong primary health care system, comprising health workers to administer the vaccines regularly and safely in every community; robust supply chains to ensure vaccines are available where they are needed, including adequate cold chains to protect vaccines from damage from exposure to heat or freezing; and the ability to engage parents so that they understand the need for, and actively seek, immunisation. Every year, the number of births in Gavi-supported countries increases, which means that immunisation programmes need to immunise more children just to maintain the same level of coverage.

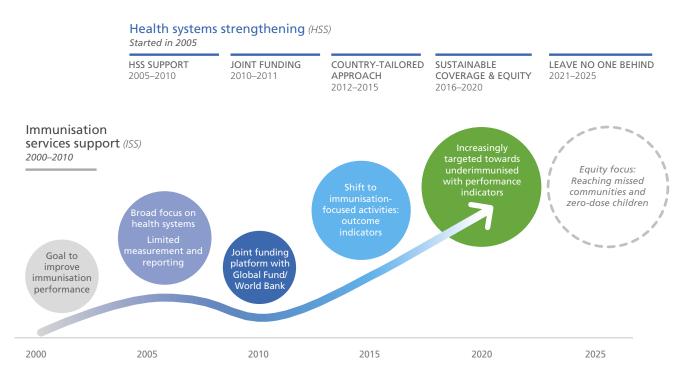
The Alliance's ambition is not to maintain the same level of coverage but to increase it and reach every child with immunisation. **Gavi support has helped** countries increase the number of children

immunised each year, resulting in an increase of 50% over the last 18 years, nearly halving the number of children being missed despite population growth.xxiv It has also enabled countries to build the capacity needed to conduct over 400 vaccine introductions and campaigns and contain numerous disease outbreaks.

However, over 15 million children annually in lower-income countries are still missing out on a full course of the most basic vaccines and over 10 million do not even receive a first dose.\*\* Gavi has therefore made equity the organising principle of its 2021–2025 strategy. The Alliance will redouble efforts to extend immunisation services to those communities who are being systematically missed today. With sufficient focus, new investment and innovation, every community can be reached with immunisation by 2030 and deliver on the SDGs' vision of true universality.

Delivering on this vision will not be easy. The challenges of fragility, population growth, displacement, migration and climate change are all growing.

### > Figure 5 THE EVOLUTION OF GAVI HSS SUPPORT



And as countries transition out of Gavi support, those that remain Gavi-eligible tend to be more exposed to these challenges and have weaker systems to respond to them. Reaching the last children in these countries will therefore be more costly and require greater investment and new ways of working. Gavi will target funding and tailor approaches to subnational contexts, to tackle the urgent needs of communities yet to be reached.

The Alliance has adapted the way it supports countries. Health systems grants are more targeted towards the areas where most of the underimmunised live; Gavi has scaled up country-driven, transparent and performance-based technical support; and launched a new mechanism to rapidly scale up innovative and climate-friendly cold chain equipment to countries, with 65,000 refrigerators expected to be in place by 2020.

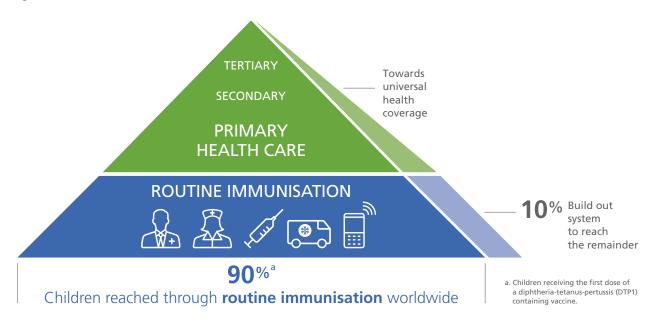
An innovative approach in this period has enabled Gavi to move quickly and gain critical learnings.

In the next period, Gavi will catalyse networks, flexible funding mechanisms and diverse partnerships to further help countries build and strengthen their primary health care systems.

A focus on gender will be central to address the strong connection between gender-related barriers and immunisation inequities. Renewed emphasis on other key barriers to equity, such as quality of services and unlocking demand for immunisation, will put missed communities first in order to truly leave no one behind.

Most of the children who do not currently receive vaccines likely live in communities where other health services are also unavailable. As the Alliance helps countries extend their capacity to deliver immunisation services to these communities, it is simultaneously building a platform through which other basic primary health care services can be provided – a platform for universal primary health care.

### > Figure 6 IMMUNISATION IS A PLATFORM FOR PRIMARY HEALTH CARE



The Alliance is also building a platform through which other basic primary health care services can be provided – a platform for universal primary health care.

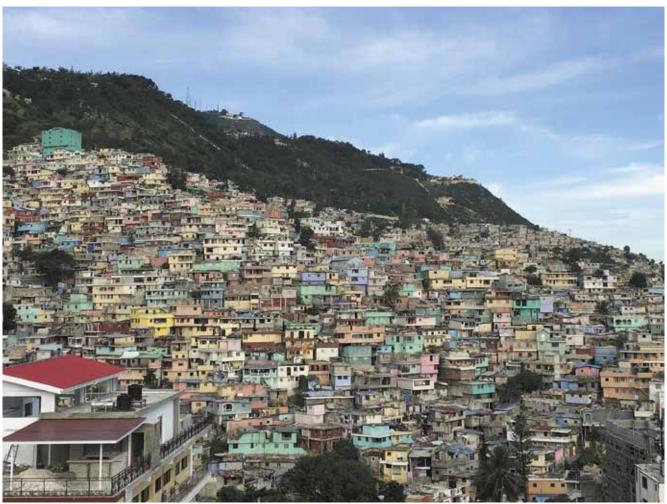
### **URBANISATION**

Urban populations are increasing rapidly. Today, 55% of the world's population live in urban areas; this is expected to increase to 68% by 2050. 90% of the global increase in urbanisation is taking place in Asia and Africa.xxvi New approaches are needed to reach the increasing number of zerodose and underimmunised children in urban slums. Residents may be recent migrants or have insecure legal or residential status, limiting access to basic health services and further heightening the risk of disease.xxvii Because their lack of public health records makes them invisible to immunisation programmes, they are less likely to be included in the planning of immunisation service delivery. In Ethiopia's urban areas, for example, approximately one third of children aged 12–23 months receive all basic vaccinations, compared with almost two thirds in rural areas.xxxiii This trend is even more pronounced in urban slums, where influxes of migrants bring new infective agents. The overcrowding that characterises urban slums increases childhood mortality from diseases that spread more easily among dense populations. Slums in Bangladesh, India and Kenya have shown increased morbidity and mortality from infectious diseases like measles, mumps, diphtheria, influenza and typhoid.xxix

To deliver on equity and sustainability in challenging urban environments, Gavi will bring new tools and approaches, tested across the Alliance. While maintaining a country-led approach, Gavi will support countries and communities to overcome the challenges of rapid urbanisation as well as its nexus with climate change and global health security.

"Immunisation is the way of the future. It is the right of every child, and it is critical to the development and prosperity of any community."

Her Excellency Reem Al Hashimy the United Arab Emirates' Minister of State for International Cooperation



Jalousie, Port-au-Prince, Haiti – Gavi/2016/Rachel Belt



### Scale up innovation

Transformational innovation is built into Gavi's DNA. The Alliance has pioneered many new approaches to vaccinating the world's most vulnerable children – from market creation to co-financing through to transitioning countries from our support. There is still more to do: persistent clusters of unvaccinated children remain and the barriers to reaching them are more complex and decentralised. Now, more than ever before, Gavi needs to adapt, accelerate and scale innovations, ensuring the Alliance is prioritising the challenges that are most critical to unlocking progress.

As a 21st century development model, Gavi has brokered many connections between the needs of countries and the innovative solutions and partners that can help address them, by utilising the comparative advantage of the public and private sectors and by catalysing country investment and putting sustainability at the core.

In each of the approaches that it has pioneered, the Alliance has been singularly driven by reaching critical immunisation outcomes. As Gavi has evolved, it has experimented with different structures of teaming and resourcing, building core competencies in brokering relationships across diverse actors, supporting countries to build financial independence and iterating until the Alliance saw the progress it knew was possible.

All the while, innovative financial mechanisms such as the Advance Market Commitment (AMC) and the International Finance Facility for Immunisation (IFFIm) have quietly underpinned much of the Alliance's work.

During the 2016–2020 period, new ways of introducing promising innovations in vaccine delivery into the Alliance were tested, notably to start tackling key bottlenecks in data management and logistics.

Driven by the Gavi Matching Fund, a mechanism designed to incentivise private sector investments in immunisation, and the Innovation for Uptake, Scale and Equity in Immunisation initiative (INFUSE), which incubates innovations to improve vaccine delivery at scale, Gavi's work with the private sector has contributed to bringing new solutions to countries: from drones for vaccine delivery in Ghana and Rwanda to sophisticated demand-side programmes in India and Africa; from digital solutions in data and registration with telecoms and financial services companies in Côte d'Ivoire and Mauritania to logistical supply chain solutions in Senegal and Uganda.

For example, Gavi is working with INFUSE pacesetter, Nexleaf Analytics, to scale up its innovative temperature sensing technology to improve the reliability of vaccine cold chains in India, Kenya, Mozambique, Senegal and the United Republic of Tanzania. This cloud-based platform builds on evidence that remote temperature monitoring reduces vaccine freezing by 44% and will help countries to make informed decisions about cold chain procurement and maintenance. Gavi's partnership with the United Parcel Service (UPS) has benefited the Alliance's Supply Chain Strategy, most recently to optimise 'last mile' delivery of vaccines in Uganda.

To address vaccine availability at the health facility level, Gavi is leveraging UPS' best-in-class logistical support to increase availability of potent vaccines. Results from three initial districts are encouraging: a reduction in stock-outs from 79% to 7% has been observed. A further UPS partnership, with support from the International Federation of Pharmaceutical Wholesalers (IFPW) Foundation, has resulted in the Strategic Training Executive Programme (STEP), which to date has provided programme management and leadership training for 250 immunisation supply chain managers from 19 countries.

Gavi's innovative activities span across immunisation products. The Alliance has promoted injection safety through the use of auto-disable syringes, as well as vaccine quality and safety with vaccine vial monitors, temperature sensors and heat-stable vaccine products.

Gavi's innovation work sits within a broader ecosystem for vaccine delivery, where multiple philanthropic and non-philanthropic players are supporting the effort to discover, incubate and validate innovations. In 2021–2025, Gavi's role in this ecosystem will be two-fold: to validate, accelerate and scale innovations that have already gone through a discovery and incubation process; and to coordinate efforts between countries, partners and innovators to bring innovations to scale.

# > Figure 7 GAVI IN THE INNOVATION VALUE CHAIN FUELLED BY OTHERS FUELLED BY GAVI DISCOVERY & EXPLORATION INCUBATION ACCELERATION & SCALING FUELLED BY GAVI ACCELERATION FUELLED BY GAVI & OTHERS

# The Alliance will continue to approach innovation as a core part of its model.

While other partners focus on investing in discovery and incubation, Gavi will double down on acceleration and scale in selected areas that can help dramatically fast-forward progress.

Gavi is well positioned to leverage flexible funding mechanisms and diverse partnerships in order to accelerate and scale innovations in vaccine delivery. During the next period, Gavi will do this by:

 Brokering connections: Gavi sits at the intersection of Alliance partners, governments and funders. Gavi is ideally placed to broker connections between the innovators and champions they need to help them introduce and scale products, services and processes in Gavi markets.

### 2. Identifying adaptive and flexible funding:

Gavi is uniquely positioned to help countries take innovations to scale. Building on Gavi's long history of financial innovation, new ways of providing financial support will be designed to unlock innovation.

### 3. Fast-tracking adaptation support:

Gavi understands the specific needs of each country and is well positioned to broker solutions to meet them. Gavi will need to do this quickly and nimbly, keeping pace with the speed of innovation and change in the information age.

### 4. Advocating for scale-ready innovators:

Leveraging the Alliance's wide-reaching network, Gavi is perfectly placed to champion and advocate for scale-ready innovations, helping to open doors to new partnerships, funding and opportunities for implementation.

### 5. Drive innovation in vaccine technologies:

The Alliance will use its market shaping capabilities to drive innovation in vaccine-related products, as well as in vaccine technologies with value-added enhancements in, for example, primary containers, route of delivery, packaging, safety, labelling and formulation.

Throughout 2021–2025, the Alliance will continue to approach innovation as a core part of its model and accelerate innovation across immunisation products, practices and services. A broader strategy for vaccine-related products and a path to scale up innovative practices and services will help unlock bottlenecks to reaching communities.

"Gavi is not only protecting the health of millions of children, its publicprivate partnership model is a catalyst for innovation and skill-sharing."

Eduardo Martinez
President,
The UPS Foundation

"What drives us in this alliance is its unique innovative business model which seeks to ensure that no child dies from any preventable illness."

Jaume Giró
CEO of "la Caixa" Banking Foundation

Gavi is well positioned to leverage flexible funding mechanisms and diverse partnerships in order to accelerate and scale innovations in vaccine delivery.

#### > Figure 8 2000–2019: A SELECTION OF INNOVATIONS BROUGHT TO SCALE

2000

Gavi created as a **global Vaccine Alliance**, bringing together public and private sectors

Gavi requires that all new vaccines be fitted with **vaccine vial monitors**. Also known as VVMs, these labels contain a heat-sensitive material which when placed on a vaccine vial registers heat exposure. By providing an easy reading as to whether a vaccine has been exposed to excessive heat over time, they clearly indicate to health workers if a vaccine can be used.

2006

IFFIm (the International Finance Facility for Immunisation) pioneers **vaccine bonds**, a unique form of truly socially responsible investments.

2002

Gavi supports introduction of **auto-disable syringes** for injection safety and boosts introduction and roll out of safe injection policies and practices to the broader health sector.

2007 -2009 Gavi introduces its **co-financing**, **eligibility and graduation** policies which put countries firmly on a trajectory towards financial sustainability, recognising that Gavi's role is only temporary and catalytic, and that countries need to prepare to phase out of Gavi support.

2009

The **Advance Market Commitment** (AMC) is launched to speed up the development and availability of vaccines against pneumonia for developing countries, making new vaccines available in Gavi countries just one year after they were available in developed countries.

2012

The meningococcal A conjugate vaccine MenAfriVac is granted a label variation to allow for its use in a **controlled temperature chain** (CTC) at temperatures of up to 40°C for up to four days.

2011

The **Gavi Matching Fund** takes off as a public-private funding mechanism encouraging business to invest in immunisation. By matching private sector contributions in cash or in kind, this mechanism helps Gavi secure the resources and expertise required to modernise vaccine delivery systems.

2015

Gavi's **Cold Chain Equipment Optimisation Platform** (CCEOP) works to shape the cold chain equipment market by accelerating innovation, helping to lower prices over time, and incentivises countries to transition to greener, more reliable, cost-effective and sustainable cold chain equipment.

In the midst of the Ebola crisis hitting West Africa, Gavi offers a new **Advance Purchase Commitment** to all manufacturers working on candidate vaccines in Phase I+. Merck enters into agreement with Gavi, committing to make 300,000 doses of investigational vaccine available to protect people against the killer disease.

The Partners' Engagement Framework (PEF) pioneers new ways of working with development organisations and engaging partners for success, with country-focus, differentiation, accountability and transparency of funding allocation to partners as core principles.

2016

Launched at Davos in 2016, INFUSE (Innovation for Uptake, Scale and Equity in Immunisation) incubates tried and tested innovations that have potential to improve vaccine delivery. It then introduces these technologies to countries so that they can be scaled.

2017

In partnership with the startup Nexleaf Analytics, Gavi starts building and scaling up an innovative **wireless temperature monitoring system** for use in rural clinics and health facilities.

2018

The world's first oral cholera vaccine packaged in **plastic tube vials** is made available and adopted by Gavi. This more cost-effective presentation allows Gavi to meet rising demand and make the vaccine easier to transport and administer in the remote areas which desperately need it.

After pioneering the technology in Rwanda and with support from Gavi, the UPS Foundation and other partners, drone company Zipline launches the world's largest vaccine drone delivery network in Ghana, which will serve up to 2,000 health facilities and 12 million people.

2019

Gavi and Unilever extended their **demand generation** partnership, building on the success of the programme launched in Uttar Pradesh, India, in 2018. Building on the two first phases, this extension will help to further tackle the biggest killers of children (pneumonia and diarrhoea), stressing the importance of immunisation compliance and handwashing with soap to drive behaviour change among parents.

Gavi, NEC and Simprints deploy an early stage, **scalable child fingerprint identification solution** to boost immunisation in developing countries. Guided by Gavi's experience and expertise in immunisation, this new project will combine Simprints' biometric fingerprint technology and NEC's reinforced authentication engine to help create digital identities for children 1–5 years of age.



### Protect the world against health insecurity

Ebola and measles outbreaks around the world are reminders that diseases do not respect borders. Epidemics can move at the speed of air travel and recent cases have raised global public awareness of the risks a globalised world is facing due to infectious disease.

A disease can now cross the globe in a fraction of the time it takes to show symptoms and before health officials realise that a crisis is brewing. At the same time, increasing urbanisation worldwide means that vulnerable people are living in close proximity to each other. This combination of global travel and rapid urbanisation has increased the risk of an explosive epidemic and underlines the need to be ready to respond.

If a lethal disease like yellow fever starts spreading in a densely populated area it can spread quickly, causing suffering and loss of life as well as interrupting trade, travel and economic activity. These risks are heightened in countries with weak primary health care systems and low detection and response capacity. Disease outbreaks, like conflict and war, can protract and reverse progress in immunisation coverage.

In addition to the heavy price that countries pay both in human lives and suffering, epidemics also carry a heavy economic cost. According to the World Bank, the Ebola outbreak which devastated West Africa in 2014–2016 decimated health systems and ruined families, who lost over 11,000 relatives. It also caused cumulative GDP losses totalling US\$ 2.8 billion in 2015. The outbreak undermined private sector growth, agricultural production and cross-border trade, reducing GDP per capita by an average of US\$ 125 in the three countries where it occurred, Guinea, Liberia and Sierra Leone.\*\*xx

As we saw during the Ebola epidemic, disease outbreaks don't respect borders. Moreover, cutting contact with the outbreak-affected countries only exacerbates the problem by grounding the supplies and personnel they need to fight the spreading disease.

Gavi is committed to ensuring doses of vaccines are available for emergency settings to respond to and avoid further spread of epidemics.

Gavi's role in addressing such threats to global health security has grown substantially since its inception. As well as helping to scale up routine immunisation, Gavi actively supports the maintenance of ever-larger global vaccine stockpiles.

During the 2021–2025 period, Gavi will strengthen investments in global health security. Routine immunisation against outbreak-prone diseases, including yellow fever, meningitis, Japanese encephalitis, cholera, typhoid and measles is the best way to prevent devastating outbreaks before they occur. Where there are pockets of under- or unimmunised people, quality campaigns, particularly in fragile countries, will help to fill immunity gaps.

Gavi will also contribute to protecting against outbreaks worldwide through its active engagement in building and managing global emergency vaccine stockpiles against major diseases – cholera, yellow fever and meningitis. Between 2006 and 2019, Gavi-supported stockpiles have helped immunise more than 90 million people.xxxi For 2021–2025, Gavi is committed to ensuring doses of vaccines are available for emergency settings, to respond to and avoid further spread of epidemics. Gavi supports emergency response campaigns to measles outbreaks.

In addition, a new Ebola vaccine stockpile, once licensed by a regulatory agency and prequalified by WHO is being considered by Gavi's Board as a critical investment given the high mortality rate of those who contract the disease. This would mean that the world is better prepared to respond to major epidemics, such as the one currently under way in North Kivu, Democratic Republic of the Congo and previously in Mbandaka in 2018, or the 2014–2016 West Africa outbreak.

"Vaccines help control epidemics and tackle drug-resistant infections. They are one of our key tools to unlocking a future of global health security."

Jeremy Farrar
Director, Wellcome Trust

### JOINING FORCES ON THE WAY TO POLIO ERADICATION

The past several years have seen tremendous progress towards the eradication of polio, with the virus now making its last stand in some of the most hard-to-reach communities in the world. As efforts to stamp out the last wild poliovirus reservoirs continue, governments, GPEI, Gavi and partners are preparing the next steps for sustaining a polio-free world.

Gavi joined the Polio Oversight Board of the GPEI in 2019, just as the eradication initiative reached a pivotal stage. Recognising the importance of improvements in routine immunisation to eradication efforts, Gavi is now working closely with GPEI to ensure that polio assets and Gavi resources are used optimally to strengthen routine immunisation systems.

The 2013–2018 Polio Endgame Strategy called for the introduction of inactivated polio vaccine (IPV) into routine immunisation programmes globally. Introduction of IPV helps protect against the remaining polioviruses and will act as an insurance policy to maintain a polio-free world once eradication is attained and the oral polio vaccine is withdrawn.

Gavi committed to support this endeavour and worked with GPEI to drive one of the fastest rollouts of a new vaccine in history. Gavi implemented the IPV programme on behalf of GPEI, with GPEI donors' funding. In addition, Gavi exceptionally funded 2019 and 2020 doses at the request of the Polio Oversight Board.

During its next strategic period, Gavi will invest US\$ 800 million into further accelerating the IPV vaccine roll-out, helping shape markets for IPV in the short term as well as working towards an affordable hexavalent vaccine (6-in-1: diphtheria, tetanus, pertussis, *Haemophilus influenzae* type B, hepatitis B and IPV) which will eventually supersede the pentavalent vaccine (5-in-1 without IPV) that Gavi has successfully introduced in all the countries which it supports.

This vaccine is critical to the eradication of polio which, if successful, will be only the second human disease after smallpox to be eradicated in human history. Thanks to polio eradication efforts, more than 18 million people are walking today who would otherwise have been paralysed.\*\*xxii Gavi is proud to be part of this effort.

### IN 2021-2025, GAVI WILL:

- → Respond to emergencies with Gavi-supported vaccine stockpiles (meningitis, yellow fever, cholera)
- → Be ready to invest up to **US\$ 150 million** in a **new Ebola vaccine stockpile**, once prequalified by WHO
- → Invest **US\$ 800 million** to further **accelerate the**IPV roll-out and provide global insurance for polio eradication
- → Strengthen routine use of **yellow fever, meningitis,** and cholera vaccines to reduce outbreak risk and reduce pressure on stockpiles over time, as well as strengthen routine use of Japanese encephalitis and typhoid vaccines
- Support emergency campaigns to respond to measles outbreaks
- → Strengthen data and disease reporting to allow early warnings of epidemics.

### CONFLICT, SECURITY, FRAGILITY AND HEALTH

Children in fragile settings are being left behind in the global effort to improve immunisation rates in the world's poorest countries. Vaccination coverage in fragile countries is almost 10% lower than in non-fragile countries, while national coverage rates mask disparities at the subnational level. Given the acute problems and rapid population growth that characterise fragile countries, simply maintaining coverage is a real challenge.

The proportion of Gavi-eligible countries that are fragile has risen from 15% in 2009 to 27% in 2018; with 60% of these countries in Africa. In July 2017, Gavi introduced a new fragility, emergencies and refugee policy to boost the number of children receiving vaccines in fragile settings, especially among vulnerable populations.

BANGLADESH became the first country to take advantage of the policy in late 2017, carrying out Gavi-funded vaccination campaigns for Rohingya refugees in Cox's Bazar. Gavi supported an emergency cholera vaccination campaign to help prevent the spread of the disease among the more than 650,000 Rohingya refugees who had fled across the border from Myanmar, as well as in the host community. The vaccination campaign was successful in preventing a large-scale cholera outbreak but low immunisation coverage among the Rohingyas caused diphtheria to sweep through,

infecting thousands. To boost immunity and prevent further outbreaks, Gavi supported measles-rubella, pneumococcal, IPV and pentavalent vaccines for over 150,000 refugee children.

**SYRIA** Gavi committed US\$ 50 million in Syria, working both in government and nongovernment-controlled areas to bring the benefits of immunisation to the millions of underserved and displaced people. Investments in routine immunisation and in the cold chain will help protect the population from childhood diseases as well as diseases of epidemic potential.

**THE NEXT EMERGENCY** What the next health emergency will be is difficult to predict, but what is certain is that there will be emergencies. By reserving some flexibility in resources through strategic investments funding, the Gavi Board will be prepared to help.

### **EMERGING CLIMATE CHALLENGES**

Every year 1.7 million deaths in children under five are linked to the environment.\*\*xxiii Over a million of these deaths occur due to respiratory infections – including pneumonia – diarrhoeal disease and malaria, many of which are vaccine-preventable. While immunisation and other health interventions have protected many children, global environmental change is increasing the risk of these diseases, putting immunisation gains and the lives of the most vulnerable at continued risk.

Climate change is expected to directly affect the prevalence of vector-borne diseases, particularly malaria. The prevalence and geographic range of Japanese encephalitis and yellow fever are also likely to rise. The global burden from water-borne and diarrhoeal disease will likely be altered by climate change and population displacement, particularly through water contamination and disruption of water and sanitation services. Current predictions estimate that by 2080 the mosquito hosting yellow fever and Zika, as well as other diseases, will move as far as Canada and Northern Europe, threatening a further 800 million people.xxxiv

Natural disasters are expected to become increasingly prevalent. In March 2019, the world was given a stark reminder of the impact of such tragedies when Cyclone Idai caused severe flooding and destruction in Mozambique, Malawi and Zimbabwe, leaving millions in need of assistance. It was the third-deadliest tropical cyclone on record. A subsequent cholera outbreak caused over 4,000 cases, and 900,000 oral cholera vaccines (OCV) were quickly released from the Gavi-funded stockpile and deployed to communities to contain the spread of the outbreak. Within a month, cases had dropped to almost zero.

Gavi's routine and stockpiled vaccines for climatesensitive diseases include yellow fever, Japanese encephalitis, meningitis A, rotavirus, cholera and typhoid fever. Gavi is co-funding the world's first malaria vaccine pilots. The Alliance is ready to play its part in addressing the effects of emerging climate challenges.

### Foster equitable prosperity

Healthy societies have healthy economies. Each dollar of investment in immunisation will give a return of 21 dollars, rising to 54 dollars when broader societal benefits are included.

Vaccines are said to be one of "the best buys in development". Through herd immunity, vaccines prevent circulation of infectious disease and protect against diseases with outbreak potential. But they also act as a powerful insurance against the economic loss caused by having to care for a sick child rather than working, or from having to spend limited income on medicines and curative services if they are available.

**Medical impoverishment** is a major constraint on economic development, when families and communities are plunged back into poverty due to illness, poverty they have worked very hard to escape from. Immunisation in Gavi-supported countries can avert a substantial number of cases of medical impoverishment and catastrophic health expenditure, with the poorest families benefiting the most.xxxv

A focus on equity within countries as an organising principle will drive Gavi's attention to those communities below the poverty line. Gavi's investments will contribute to reaching not only those left behind from health services (SDG3), but also those being targeted for **ending extreme poverty** (SDG1).

Among the countries that will be receiving Gavi support throughout the next strategic period, two out of three zero-dose or unimmunised children live below the poverty line.

**Gender inequality**, a lack of focus on the causal relationship between gender and poverty, as well as a misunderstanding of the relationships between genders are fundamental drivers of the vicious cycle of intergenerational poverty. Gavi will increasingly seek to understand these dynamics, through equity assessments and the collection of sex-disaggregated data to ensure gender is not a barrier to immunisation.

Investing with countries through a gender lens that empowers those who are marginalised to voice their concerns and influence decisions will help to bring preventive health services to those who can least afford the consequences of illness, thereby fostering equitable prosperity. In addition, through the HPV programme which helps to prevent cervical cancer, Gavi is bringing girls back into contact with the health system during adolescence. This is a critical opportunity to offer them other health information and services.

Gavi's work will release economic benefits in the order of US\$ 80–100 billion in 2021–2025. This is equivalent to at least three years of total annual official development aid (ODA) for Least Developed Countries.\*\*\* These savings can be further reinvested by countries to develop human resources for the future, creating prosperity for all by ensuring no one misses out on immunisation.

"Vaccines help prevent not just disease, but also poverty."

Joanne Carter

Executive Director, RESULTS



Gavi/2014/Karel Prinsloo

### WITH YOUR SUPPORT, WE WILL:

- → Empower women and girls through genderfocused immunisation programming approaches.
- → Contribute to a further US\$ 80–100 billion in economic benefits.
- → Help countries target increased health system and primary health care delivery to those living below the poverty line.

### Propelled by market shaping

Increasing scale over time and Gavi's approach to market shaping has resulted in a global public good of significantly better vaccine availability and pricing, meaning country and donor investments are able to go further. The total cost of fully immunising a child with pentavalent, pneumococcal and rotavirus vaccines fell by over 52% from US\$ 35 in 2010 to less than US\$ 17 in 2017.

The price reductions achieved through Gavi's market shaping model will result in savings of over US\$ 900 million over 2021–2025, an increase of roughly US\$ 200 million over already impressive results from the previous period.xxxviii Smart negotiation, expanding numbers of vaccine manufacturers and healthy competition, collaborative approaches and intelligent investment ensure that countries' and donors' money goes further.

Gavi's work with vaccine manufacturers in 2021–2025 will build on the successful expansion of the supplier base between 2000 and 2019. During this time Gavi went from 5 mainly developed country manufacturers to 17 manufacturers from around the world.xxxviii

Gavi is not only concerned about the health of communities, it is also concerned about the health of the vaccine markets which underpin its work as well as the future sustainability of those markets for countries to access. The healthy markets framework developed by Gavi, UNICEF Supply Division and the Bill & Melinda Gates Foundation sets out the critical building blocks required to assess progress.

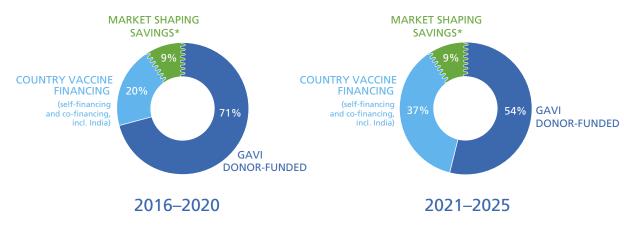
A greater set of suppliers means better supply security. If there are manufacturing issues, others can step in due to the presence of buffer stocks. Looking ahead, Gavi will continue to tackle vaccine markets with inadequate supply, seek to ensure supply meets demand as well as countries' preferences, and work with the industry to bring forward new suppliers in 2021–2025.

In healthier markets, Gavi's focus will shift to maintaining long-term competition and incentivising innovations that improve vaccine presentation, delivery and total systems costs.

### WITH YOUR SUPPORT, WE WILL:

- → Generate US\$ 900 million in donor cost savings in 2021–2025 through reduced prices of the powerful vaccines presented in the Berlin Investment Opportunity.<sup>7</sup>
- → Ensure **sustainable**, **healthy market dynamics** for vaccines and immunisation-related products at affordable prices.
- → Enhance the **competitiveness and supply security** of at least five Gavi-supported markets with additional product choices from new manufacturers.
- → Incentivise development and scale up innovation of suitable vaccines and of innovative immunisation-related products.

### > Figure 9 PROJECTED IMPACT OF DYNAMIC RESOURCE MOBILISATION MODEL ON DONOR SHARE OF TOTAL FINANCING



\*2015 market shaping pricing baseline

In order to immunise over 300 million children and save 7–8 million lives, finance stockpiles for outbreak diseases, strengthen health systems and contribute US\$ 80–100 billion in economic benefits, Gavi's expenditure needs to be at least US\$ 9.4 billion for the period 2021–2025.

#### **VACCINE PROGRAMMES**

Gavi will invest US\$ 5.3 billion in vaccine programmes in 2021–2025. This support will include the continuation of Gavi's current portfolio of vaccines such as the pentavalent, rotavirus and pneumococcal vaccines. Newly-approved support for vaccines in the next period, which include diphtheria, tetanus and pertussis (DTP) boosters, hepatitis B birth dose, multivalent meningococcal, RSV, routine oral cholera and rabies, will cost up to US\$ 360 million over the period. The Gavi Board can also decide to make a further investment in the Ebola vaccine stockpile, which is estimated to require an additional US\$ 150 million. Investment in targeted campaigns, when necessary, will be a critical component of the prevention and protection agendas to supplement routine activity and/or respond to outbreaks.

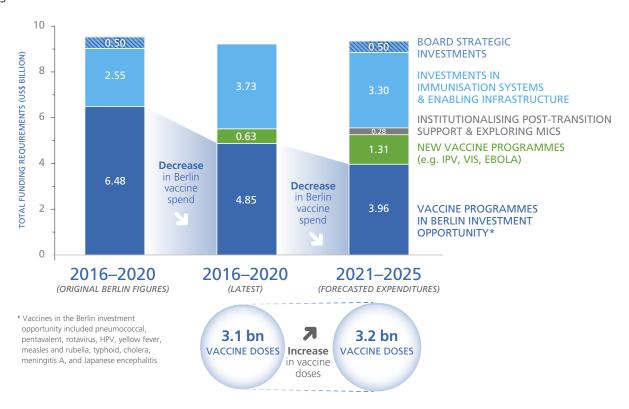
Gavi will put US\$ 800 million towards **insuring the** world against polio re-emergence, through the continued roll-out of IPV.

While coverage of the vaccines delivered as part of the Investment Opportunity 2016–2020 will continue to expand, expenditure on these vaccines is decreasing, as per the promise made in Berlin. Reductions in vaccine prices and countries increasing co-financing and transitioning out of Gavi support are driving these savings. Altogether, this is expected to reduce the vaccine spend of the 2016–2020 package of vaccines to US\$ 3.96 billion, from the original figure of US\$ 6.48 billion. The Gavi model is driving efficiencies in donor spending by making investments go further than ever before.

### INVESTMENTS IN IMMUNISATION SYSTEMS AND ENABLING INFRASTRUCTURE

Gavi will invest US\$ 3.3 billion in immunisation systems and enabling infrastructure in the next period. This includes activities which are crucial to putting countries on the path to **equitable**, **sustainable provision of vaccines to populations**, whomever they are and wherever they reside.

### > Figure 10 EFFICIENCIES IN VACCINE FINANCING OVER TIME



This category combines cash grant support and enabling infrastructure which includes the Partners' Engagement Framework and operating expenses. This support will be critical to ensuring that targeted and tailored support can be put in place to reach communities with vaccination efficiently and effectively.

Over the next strategic period, the Alliance will invest at least US\$ 1.1 billion in **health systems strengthening** grants to countries to strengthen the elements of their health systems which are most critical to the delivery of immunisation. This includes supply chains, data systems, community engagement, gender transformative strategies, demand generation and leadership and management capacities. These grants will be increasingly targeted at extending immunisation services to reach missed communities and overcoming barriers to equity.

**Ensuring programmes are evaluated** is a key priority for Gavi, as a learning organisation. Around US\$ 90 million will be dedicated to ensuring Gavi continues to invest in evaluations that help the Alliance continually improve its support to countries and to immunisation stakeholders.

### POST-TRANSITION SUPPORT & EXPLORING MIDDLE-INCOME COUNTRIES

Up to US\$ 281 million (up to 3% of Gavi's total expenditure) is budgeted for **targeted support to countries post-transition**. Within this envelope, Gavi's Board will also be in a position to decide on razor-sharp, catalytic and time-limited interventions in middle-income countries (MICs) where they make sense, helping them to use their own domestic resources more effectively to introduce new vaccines and increase equity. This is particularly important because by 2030, 70% of underimmunised children are currently projected to be in MICs.xxxix

A range of never Gavi-eligible middle-income countries with a GNI per capita below US\$ 4,000 face similar challenges to those experienced by Gavi-eligible ones. The Gavi Secretariat will explore options to engage with these countries based on the same set of modalities. It will also explore options to engage with middle-income countries with a GNI per capita below US\$ 6,000, potentially with slightly different engagement modalities. The Gavi Board will decide on the most appropriate way forward. Innovative financing mechanisms to facilitate this engagement will also be explored.

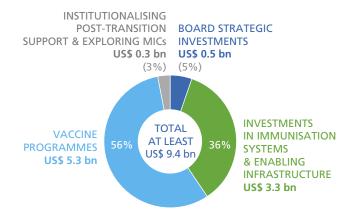
#### **BOARD STRATEGIC INVESTMENTS**

As in the 2016–2020 investment opportunity, a US\$ 500 million provision is **included for strategic investments** in the next period, which is critical to address unforeseen challenges and respond to opportunities to reach the unreached. This will provide the flexibility for the Gavi Board to approve adequate responses to emergencies and invest in new tools and approaches to reach missed communities. In 2016–2020, this envelope was notably used for the roll-out of new vaccines and to improve coverage levels in India, the country with the largest birth cohort. The envelope was also used to scale up measles and rubella campaigns as well as provide support to Syria, which collectively resulted in almost one million additional lives saved.

In the next period, strategic investments could allow the Board to accelerate new vaccines, respond to situations of fragility, aggressively address pockets of low coverage and swiftly scale up innovations that enable countries and communities to accelerate on their path towards healthy lives and well-being for all.

With Gavi, 97 cents out of every US\$ 1 goes to supporting vaccine programmes. Gavi will maintain this efficient model into 2021–2025. The Gavi Secretariat will continue to coordinate the Alliance, support the Board, manage the Alliance's resources and monitor and evaluate progress with annual overheads staying at less than 3%.

### > Figure 11 **OVERVIEW OF GAVI EXPENDITURE** 2021–2025



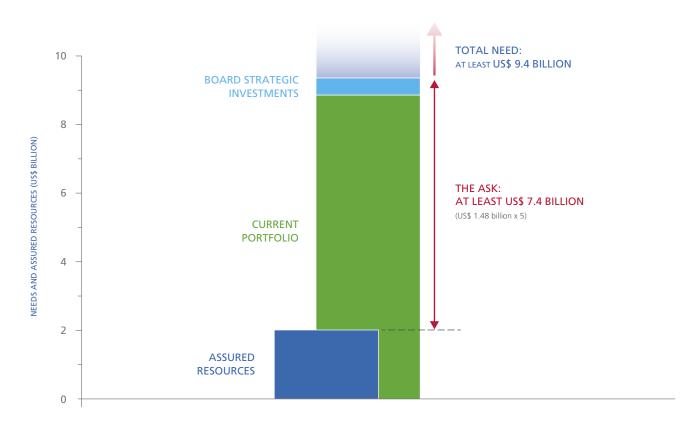
#### **ASSURED RESOURCES 2021–2025**

Gavi expects to have resources of US\$ 2 billion already available for the next strategic period. These resources consist mainly of proceeds from existing donor pledges to the International Finance Facility for Immunisation (IFFIm), some preliminary pledge extensions, investment income and a drawdown from Gavi's cash and investment reserve. Gavi needs therefore to raise at least **US\$ 7.4 billion for**2021–2025 – to meet an average requirement of US\$ 1.48 billion per year – through direct contributions and other innovative finance sources, including the proceeds of new pledges to IFFIm.

With the political will and investment of countries, the ingenuity of the Alliance and partners, and the generosity of its donors, we can achieve a world where we make vaccines work for all.

IFFIm has provided long-term, predictable and flexible funding since the inaugural vaccine bond was released onto the market in 2006. Having frontloaded its funding in past periods, the existing structure is in a repayment phase where donor contributions exceed IFFIm proceeds to Gavi. This means that IFFIm is operating as intended. Given the level of assets remaining and the current disbursement schedule, IFFIm would enter a winddown mode midway through the 2021-2025 strategic period which would likely be irreversible, rendering IFFIm unavailable to Gavi in the future. In the next period, new funding through IFFIm - were donors able and interested to do so – would allow Gavi to continue to benefit from a fresh pool of flexible, long-term capital to fund programmes. Gavi encourages donors seeking an immediate, outsized impact on global immunisation to consider a longterm IFFIm commitment.

### > Figure 12 **GAVI NEEDS FOR 2021–2025**



### Mitigating risks

Gavi's approach to risk management is a powerful tool to ensure resources are deployed effectively and efficiently. Transparent reporting, tracking of key performance indicators and frequent communication to stakeholders on emerging and known risks all allow for precise planning, advocacy and risk mitigation.

Three types of risk are significant to this investment opportunity.

#### **FINANCIAL RISK**

If there are insufficient resources to deploy in 2021–2025, the risk of backsliding on the tremendous progress made to date is real. If the world does not fully fund the investment opportunity, then hard choices will have to be made as to the priority of programmes. Funding of all routine programmes, targeted preventive campaigns and vaccine stockpiles which protect the world from the increasing risk of outbreaks will not be possible. This has implications not only for the poorest people's ability to live healthy lives, but also their ability to thrive and lift themselves out of poverty permanently. In a world without vaccines, disease outbreaks would cause untold economic loss, not only to families and communities from unnecessary suffering and loss of earnings, but this would be multiplied many times over by loss of trade, lost productivity, and decimated health services. All the hard-fought gains made would be reversed but with far greater global implications in a hyper-connected world. It can be a major threat to global prosperity and security if we do not take steps to stop disease at source.

### **SUPPLY RISK**

Gavi's public-private partnership model has created an unprecedented scale of immunisation programmes, benefiting communities, countries and vaccine manufacturers alike. To ensure that countries can plan with full confidence that vaccines will be available in the quantities and quality they demand, and manufacturers can plan production and be assured of payment, Gavi will continue to work to reduce the risk of supply shocks and shortages.

It will do this through engagement with emerging and established manufacturers, broadening the base and mitigating risk through healthy competition. Gavi's continued support to countries relies on the contractual production capacity of manufacturing suppliers, in addition to Gavi's attractiveness as a buyer of vaccines. Gavi will work towards eliminating the risk that countries cannot access the supply they demand. Access to vaccines is not usually an issue for a child in the UK, nor should it be for a child in Sierra Leone.

#### **EQUITY RISK**

Gavi's enabling support is structured to provide countries with the very best of catalytic capital, technical advice and coordination functions. In the 2021–2025 period, the principle of equity will underpin our work. Reaching the last mile first and finding those hidden in plain sight. This means bringing immunisation services to those most in need. There is a risk that the ingredients required to make this a reality do not coalesce to achieve Gavi's ambition: from wavering country ownership and political will to reach the zero-dose communities, to ensuring the continued immunisation of those already within the system, to suboptimal programmes built on inaccurate data and misaligned technical advice. Gavi's scale and country-driven approach, the Alliance's inclusive and collaborative structure, and the Secretariat's expertise and work with new tools and approaches together create a substantial mitigant.



### Together, we can achieve a bold ambition

Hans Rosling's "Factfulness" demonstrates that consolidated and determined action has created unparalleled returns on health investment since the turn of the century. The facts tell us that vaccines reach more people than any other health intervention and the gap in access to vaccines between rich and poor countries has narrowed significantly since Gavi, the Vaccine Alliance was created. The same data reminds us this progress has taken place within an era of population growth unseen in human history. But despite tremendous progress, the job is far from done.

Powered by country leadership, Gavi is leveraging its dynamic model to offer more vaccines at lower costs, while countries assume an increasing share of those costs until transitioning out of Gavi support. This drives efficiencies in donors' investments in immunisation.

In finance, it is said that past performance may not be indicative of future results. In development, the opposite is true. With this opportunity for investment comes the promise of unprecedented life-saving, life-affirming prosperity for many. Protecting the next generation, contributing to the future prosperity of people and planet, and bringing joy and happiness to hundreds of millions of people whose grandparents' lives would have been very different to theirs – this is an achievable ambition and it is within our grasp.

There is nothing more painful than for a parent to lose a child or to watch their child develop a lifelong debilitating disability. By providing prevention children can grow up healthy and live up to their full potential. There are many challenges we will be leaving to the next generation. Let us give them the chance, through immunisation, to step up and address those challenges.

Now is the time to build on the unprecedented gains from Gavi's past investments and historical achievements to bring about continued acceleration of immunisation. Gavi can offer the most complete package of prevention and protection ever. Its collaborative model continues to pull innovation from vaccine manufacturers, by guaranteeing a market and consolidating country demand. It brings the best resources in global health and immunisation together, through Gavi's curation of comparative advantage. In the final decade of the SDGs, Gavi can provide prevention, protection and prosperity to hundreds of millions more communities and families.

With the political will and investment of countries, the ingenuity of the Alliance and partners, and the generosity of its donors, we can achieve a world where we make **vaccines work for all**.



### **Endnotes**

- <sup>1</sup>United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). Retrieved from: https://childmortality.org/data
- "United Nations DESA Population Division. 2019 Revision of World Population Prospects. Retrieved from https://population.un.org/wpp/
- The figure of 760 million refers to the total number of children reached with the last recommended dose of a Gavi-supported vaccine delivered through routine systems, corrected on a country-by-country basis so that children receiving multiple vaccines are not double-counted. Computed based on WHO/UNICEF Estimates of National Immunisation Coverage (WUENIC), July 2019 update.
- iv Based on cause of death estimates published by WHO and the Institute for Health Metrics and Evaluation. Please see technical appendix for details.
- <sup>v</sup> Cancer Today. International Agency for Research on Cancer, World Health Organization. Retrieved from http://gco.iarc.fr/today/home
- vi Based on WHO/UNICEF Estimates of National Immunisation Coverage (WUENIC), July 2019 update.
- vii WHO immunization fact sheet, 18 July 2019. Retrieved from https://www.who.int/news-room/facts-in-pictures/detail/immunization
- viii Based on analysis of household survey data on immunisation coverage and household wealth, combined with World Bank data on poverty headcount ratios using an international poverty line of US\$ 1.90 per day. Please see technical appendix for more detail.
- <sup>ix</sup> For example, see: Nandi A, Shet A, Behrman JR, et al. Anthropometric, cognitive, and schooling benefits of measles vaccination: Longitudinal cohort analysis in Ethiopia, India, and Vietnam. *Vaccine* 2019, 37; Nandi, A, Deolalikar, A.B., Bloom, D.E. and Laxminarayan, R. *Haemophilus influenzae* type b vaccination and anthropometric, cognitive, and schooling outcomes among Indian children. *Annals of the New York Academy of Sciences* 2019; Driessen J, Razzaque A, Walker D, Canning D. The effect of childhood measles vaccination on school enrolment in Matlab, Bangladesh. *Applied Economics* 2015. 47(55); Doherty M, Buchy P, Standaert B, Giaquinto C, Prado-Cohrs D. Vaccine impact: benefits for human health. *Vaccine* 2016 34(52).
- \* Johns Hopkins University International Vaccine Access Center (IVAC), 2019. Methodology Report: Decade of Vaccines Economics (DOVE) Return on Investment Analysis. Retrieved from http://immunizationeconomics.org/dove-roi. Update of an original study by Ozawa et al. (2016) that estimated a return on investment of 48:1 for immunisation in Gavi-supported countries. Reference to original study: Ozawa S, Clark S, Portnoy A, Grewal S, Brenzel L, Walker DG. Return on investment from childhood immunization in low-and middle-income countries, 2011–20. *Health Affairs* 2016, 35(2): 199–207.
- xi Methods used to estimate impact numbers are described in the technical appendix. The number reached corresponds to Gavi's strategy indicator of unique children immunised and was calculated using Gavi's operational forecasts. Future deaths averted were estimated using impact models from the Vaccine Impact Modelling Consortium, January 2019 update.
- xii Based on the Gavi operational forecast November 2018 update. Gavi's forecast uses IMF country projections of GDP growth to forecast countries' eligibility.
- xiii Based on Gavi's operational forecast, using projections of country demand and applying current rules of co-financing, November 2018 update. The estimate does not include co-financing for campaigns, new VIS vaccines and IPV. The estimate includes an estimate from the Gavi Secretariat for India based on the latest data available on current consumptions of vaccines.
- xiv Expected economic benefits were estimated by the International Vaccine Access Center (IVAC) at Johns Hopkins University using the DOVE-cost of illness (DOVE-COI) models. The models calculate the value of averting short and long-term costs associated with achieving immunisation coverage levels specified in the Gavi operational forecast, November 2018 update. Please see the technical appendix for more details.
- \*\* Gavi Alliance Supply and Procurement Roadmaps determine Gavi's long-term market ambition for each vaccine or immunisation product (public summary versions available at https://www.gavi.org/about/market-shaping/supply-and-procurement-roadmaps/). They present both a short- and long-term view of how we would like the market to evolve for a particular vaccine or product and identify mechanisms that can help to influence it. Over the Gavi5.0 strategic period, we anticipate at least five Gavi-supported markets will show improvements in their dynamics, particularly with respect to competitiveness and supply security as a result of new market entrants and additional supply availability from manufacturers. The Alliance's Healthy Markets Framework (HMF) is used as a tool to assess the healthy state of markets and track progression over time and is currently the basis of one of the Gavi4.0 SG4 indicators. Further information on the HMF and SG4 indicator is available online at https://www.gavi.org/library/gavi-documents/supply-procurement/healthy-markets-framework--public-overview/; https://www.gavi.org/results/measuring/2016-2020-indicators/market-shaping-goal/
- **\*\*\*** Estimated number of doses that Gavi will procure for the years 2021–2025 as per its financial forecast as of June 2019. Includes IPV doses for 70 countries.
- **xvii** Expected health system touchpoints are computed based on Gavi's forecasts of future vaccine coverage and vaccine schedules for Gavi-supported vaccines, counting the number of distinct health system contacts required to administer anticipated vaccinations in the next strategy period. Additional details are provided in the technical appendix.
- \*viii Preliminary estimates, potentially subject to adjustments. Johns Hopkins University International Vaccine Access Center (IVAC), 2019. Methodology Report: Decade of Vaccines Economics (DOVE) Return on Investment Analysis. Retrieved from http://immunizationeconomics.org/dove-roi

- xix Co-financing data from 2016–2018 based on actuals reported by UNICEF Supply Division (SD) and countries which self-procure. Co-financing for 2019–2020 based on Gavi's operational forecast, November 2018 update. Self-financing amounts for the period 2016–2020 are based on estimates of demand doses from Gavi's operational forecast and Gavi prices.
- \*\* Coverage in transitioned countries refers to DTP3 coverage from WHO/UNICEF Estimates of National Immunization Coverage (WUENIC), July 2019 update. Note Bolivia is an exception: coverage declined from 84% to 83% between 2017 and 2018.
- \*\*i Gavi HPV forecasts were updated in June 2019 to reflect the latest information available on various supply and programmatic scenarios. Please see technical appendix for more details.
- \*\*\*ii According to WUENIC estimates, coverage in Gavi 68 countries of BCG, DTP1 and DTP3 was respectively 85%, 87% and 81% in 2018.
- \*\*\*iii The number of doses is based on the number of children who were immunised in 68 Gavi countries through routine systems multiplied by the number of doses required to complete a course of vaccination, summed across different vaccines. Over 65 million immunised represents the number of children in the 68 Gavi countries who received the DTP vaccine. Please see the technical appendix for more details.
- \*\*\*\*\* The increase in the number of children immunised in the last 18 years refers to the total number of children immunised with a third dose of DTP in 2018 compared to 2000 in 68 Gavi countries. The decline in the number of children missed refers to the number of children who received no doses of DTP in 2018 compared to 2000 in 68 Gavi countries. Computed from the WHO/UNICEF Estimates of National Immunization Coverage (WUENIC), July 2019 update.
- \*\*\* 15 million children missed annually refers to the total number of children living in 68 Gavi countries who only received the first dose of DTP in 2018. 10 million children not receiving a first dose refers to the total number of children living in 68 Gavi countries who did not receive the first dose of DTP in 2018. Computed from the WHO/UNICEF Estimates of National Immunization Coverage (WUENIC), July 2019 update.
- xxvi United Nations Department of Economic and Social Affairs, DESA, May 16, 2018. Retrieved from https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html
- \*\*vii Crocker-Buque, T., Mindra, G., Duncan, R., & Mounier-Jack, S. Immunization, urbanization and slums—a systematic review of factors and interventions. *BMC Public Health* 2017, 17(1): 556.
- \*\*\*\* Crocker-Buque, T. et al. (2017). \*\*\*\*\* Crocker-Buque, T. et al. (2017).
- \*\*\* World Bank. 2014–2015 West Africa Ebola Crisis: Impact Update, May 2016. Retrieved from: https://www.worldbank.org/en/topic/macroeconomics/publication/2014-2015-west-africa-ebola-crisis-impact-update
- \*\*\*\*i Number immunised through Gavi-supported stockpiles was calculated as the number of doses accessed from stockpiles adjusted for wastage and divided by the number of doses needed to immunise one person. The number of doses accessed were obtained from UNICEF Supply Division, and wastage rates and doses per fully immunised person were obtained from the Gavi Detailed Product Profiles, June 2018 update. Retrieved from https://www.gavi.org/about/market-shaping/detailed-product-profiles/
- \*\*\*\*ii Global Polio Eradication Initiative (GPEI) Fact Sheet. March 2019. Retrieved from: http://polioeradication.org/wp-content/uploads/2019/03/GPEI-Fact-Sheet-March-2019-20190315.pdf
- \*\*\*\*iii Inheriting a sustainable world? Atlas on children's health and the environment. Geneva: World Health Organization; 2017.
- \*\*\*xiv Ryan SJ, Carlson CJ, Mordecai EA, Johnson LR. Global expansion and redistribution of Aedes-borne virus transmission risk with climate change. *PLoS neglected tropical diseases* 2019. 13(3): e0007213.
- \*\*\*\* Chang AY, Riumallo-Heri C, Perales NA et al. The Impact Future Vaccines May Have on Averting Deaths and Medical Impoverishment in Forty-One Countries. *Health Affairs 2018*, 37(2):316–324. Riumallo-Herl C, Chang AY, Clark S, Constenla D, Clark A, Brenzel L, Verguet S. Poverty reduction and equity benefits of introducing or scaling up measles, rotavirus and pneumococcal vaccines in low-income and middle-income countries: a modelling study. *BMJ global health* 2018, 3(2): e000613.
- \*\*\*\*vi Preliminary ODA data 2018 total falls for second consecutive year, Development Initiatives, April 10, 2019. Retrieved from http://devinit.org/post/final-oda-data-2018-message
- \*\*\*x\*vii Market shaping savings for 2021-2025 are calculated by comparing latest financial projections (based on 2019 price and demand forecasting "v16.0Fb"), against counterfactual financial projections applying 2015 UNICEF prices across all years. Market shaping savings for 2016-2020 are calculated by comparing actual costs and latest financial projections (based on UNICEF 2016-2018 shipment data and 2019 price and demand forecasting), against counterfactual financial projections applying 2015 UNICEF prices across all years. Note that savings are for Gavi Secretariat cost only and not country costs (based on the composition of Gavi vs country financed doses within the latest 2019 demand forecast).
- \*\*\*xviii Gavi suppliers and manufacturers of prequalified and appropriate Gavi vaccines (based on 2019 UNICEF data): Bharat Biotech, Bilthoven Biological (Serum Institute of India), Biological E, Bio-Manguinhos, CDIBP (CNBG), Chumakov Institute, EuBiologics, GlaxoSmithKline, Institute Pasteur Dakar, LG Life Sciences, Merck & Co., Panacea Biotech, Pfizer, PT Bio Farma, Sanofi Pasteur, Shantha Biotechnics (Sanofi Pasteur), Serum Institute of India.
- xxxix Based on the Gavi operational forecast. Underimmunised refers to children not receiving the third dose of DTP.

### THE VACCINE ALLIANCE MEMBERS

BILL & MELINDA GATES foundation The Bill & Melinda Gates Foundation's initial pledge of US\$ 750 million in 1999 provided the seed money to launch Gavi. The Foundation plays both a technical and financial role in the Alliance's efforts to shape vaccine markets and continues to be a strong supporter.



As the UN's specialist agency on global health issues, WHO provides normative guidance. WHO supports and facilitates research and development, sets standards and regulates vaccine quality and develops evidence-based policy options to guide vaccine use and maximise country access.



UNICEF provides the procurement services for the Alliance, making it the world's biggest buyer and supplier of vaccines for developing countries. UNICEF has a pivotal role both in implementing immunisation programmes in Gavi-supported countries and in shaping the Alliance's policies. UNICEF helps countries analyse and overcome obstacles to improving immunisation coverage and equity.



The World Bank brings the expertise of the world's biggest source of development assistance to the Alliance. The Bank is the fiduciary agent for Gavi's innovative finance mechanisms. It helped to set up IFFIm and is now its financial advisor and treasury manager. The Bank also supports the Advance Market Commitment (AMC) that is helping to accelerate development and delivery of the pneumococcal vaccine.

#### **PARTNERS**

#### **Developing country governments**

Developing countries are the most important part of the Alliance. They identify their immunisation needs, co-finance and implement vaccine programmes.

#### **Donor country governments**

Donor country governments' experience and funding ensure health is prioritised in development programmes and that the Alliance is funded.

#### **Civil society organisations**

CSOs help deliver vaccines to remote communities, implement vaccine programmes and advocate for immunisation.

### Pharmaceutical industry

Our partnership with vaccine companies harnesses their research and technical expertise to supply vaccines that address the needs of developing countries. More than half of Gavi vaccine suppliers are based in emerging markets.

#### **Private sector**

Gavi leverages private sector innovation, expertise and resources to address challenges in delivering, measuring and creating demand for vaccines.

### Research and technical health institutes

Partnering with the research community allows Gavi to tap into the latest information and thinking from the scientific, medical and product delivery field. Gavi's technical partners provide assistance for improved immunisation programme delivery.

### GAVI'S CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS

Immunisation is one of the best buys in global health and key to the achievement of the SDGs.

### 1. NO POVERTY

HEALTHY CHILDREN AND FAMILIES = INCREASED PROSPERITY



Immunisation protects people from being forced into poverty due to high out-of-pocket health expenditures. Every year, healthcare costs push approximately 100 million people into poverty. Focusing on prevention rather than expensive treatment, immunisation by 2030 will help to prevent 24 million households in 41 low- and middle-income countries from slipping into poverty.

### 2. ZERO HUNGER

IMMUNISATION + NUTRITION = HEALTHIER FAMILIES



Immunisation provides a platform for delivering nutrition interventions and work hand in hand with good nutrition to help reduce child mortality. Vaccine-preventable diseases could tip children into a malnourished state as they impair the absorption of essential nutrients. Malnourished children are more likely to die from infectious diseases such as diarrhoea, measles and pneumonia, many of which can be prevented by vaccines.

# 3. GOOD HEALTH AND WELL-BEING IMMUNISATION = HEALTHY LIVES AND WELL-BEING



Immunisation is one of the most costeffective ways to save lives and promote good health and well-being. Every year, vaccines save 2-3 million lives, and millions more are protected from disease and disability. It routinely reaches more households than any other health service and brings communities into regular contact with the health system. This provides an effective platform to deliver other primary health care services and upon which to build universal health coverage.

### 4. QUALITY EDUCATION

IMMUNISATION = IMPROVED LEARNING



Immunisation increases educational attainment since vaccinated children learn more while they are able to go to school and

perform better, positively impacting on cognitive development as well as long-term productivity. Moreover, schools are a platform for health promotion, delivery of vaccines and other health services. The benefits flow both ways: children of educated parents have a greater chance of being immunised and well-nourished and thus enjoy better health.

### 5. GENDER EQUALITY

IMMUNISATION = EMPOWERED WOMEN AND GIRLS



Immunisation is a gender-equal intervention. Globally, girls and boys are immunised at similar rates. However, there are variations at subnational levels and in some countries because a range of different barriers inhibit women's ability to access healthcare for their children. Gavi supports countries to make focused efforts to identify and address gender-related barriers to immunisation services, such as through training female health workers, as empowering women is critical to improving child vaccination coverage.

### 6. CLEAN WATER AND SANITATION

WASH + IMMUNISATION = LESS DISEASE



Vaccines, along with clean water, sanitation and hygiene (WASH), are proven interventions to prevent diarrhoeal diseases, a leading cause of child mortality in developing countries. Investments in oral cholera and rotavirus vaccines, WASH and health systems form an integrated approach to help eliminate diarrhoeal disease.

## 7. AFFORDABLE AND CLEAN ENERGY EFFICIENT EQUIPMENT = CLEANER ENVIRONMENT



Immunisation brings newer, cleaner and more sustainable technology to developing countries' health systems. For instance, Gavi's cold chain equipment optimisation platform gives countries access to solar and energy efficient refrigeration, which is not only more reliable and cost-effective but also more environmentally friendly. Our support includes vaccine monitoring devices that ensure optimum energy usage and reduce wastage.

### 8. DECENT WORK AND ECONOMIC GROWTH

HEALTHY POPULATION =
MORE PRODUCTIVE WORKFORCE



Investment in human capital can dramatically strengthen a country's competitiveness. Vaccinated, healthy children grow into a productive workforce and become strong contributors to the economy. In addition, healthy children free up parents' time so they are able to work. In Gavi-supported countries, every US\$ 1 spent on immunisation generates US\$ 54 in broader societal benefits of people living longer and healthier lives.

### 9. INDUSTRY, INNOVATION AND INFRASTRUCTURE

HEALTHY VACCINE MARKET = INNOVATION



Gavi makes vaccine markets work better by attracting more suppliers, dramatically reducing vaccine prices and ensuring more equitable and sustainable access to vaccines and other innovative products that meet developing countries' needs. Since our inception in 2000, we have contributed to a significant increase in new manufacturers supplying vaccines for Gavi and the majority of the vaccine doses we procure are manufactured in developing countries.

### 10. REDUCED INEQUALITY

BETTER HEALTH = INCREASED EQUALITY



Immunisation protects the health of communities, reduces the number of people forced into poverty, and gives children an equal chance of a healthier and more productive future. By focusing on the underserved communities and unimmunised ("zero dose") children in the poorest and most marginalised populations, especially the urban poor and those living in remote rural settings and conflict areas, Gavi brings immunisation and primary health care services to those furthest behind.

### 11. SUSTAINABLE CITIES AND COMMUNITIES

IMMUNISATION = HEALTHIER CITIES



By 2050, nearly 70% of the global population will be living in urban areas. The number of people living in slums or informal settlements has also grown to over 1 billion, many of whom lack access to

basic health services. Strengthening urban immunisation programmes protects them against the increased risk of disease outbreaks and is an opportunity to bring integrated preventative services to urban and underserved communities.

### 13. CLIMATE ACTION

IMMUNISATION = MITIGATION OF CLIMATE CHANGE IMPACT



The impact of climate change cuts across health and well-being, livelihood, and security of people, particularly for the poorest and most vulnerable communities, such as people on the move. Immunisation is critical to building people's and systems' resilience to and reducing the risk of outbreaks due to climate-sensitive diseases, such as yellow fever, cholera and Ebola, particularly in urban, fragile and post-disaster settings.

### 16. PEACE, JUSTICE AND STRONG INSTITUTIONS

STRONG HEALTH SYSTEMS = LONG-TERM STABILITY



Effective, safe, and people-centred health systems are the backbone of social institutions in every country, and immunisation is often the first point of contact between these systems and the population. Through Gavi support, countries' efforts to improve equitable access to vaccines contributes to building public trust, stronger social cohesion, peaceful and inclusive societies.

### 17. PARTNERSHIPS FOR THE GOALS

INNOVATIVE PARTNERSHIP = UNPRECEDENTED PROGRESS



Leveraging the comparative advantage of each partner, the Vaccine Alliance's innovative public-private partnership model has transformed global progress by accelerating equitable and sustainable access to vaccines both at scale and pace. Since 2000, Gavi support has helped countries immunise more than 760 million children. This has helped to reduce deaths from vaccine-preventable diseases by more than 60 per cent and played a key role in halving the under-five mortality rate in those countries.

# THE GAVI VACCINES AND WHAT THEY PROTECT AGAINST

### Cholera



Cholera is a disease of poverty and inequity, occurring almost exclusively in areas with poorly developed water and sanitation systems or humanitarian crises. Cholera is an extremely infectious disease that can cause acute watery diarrhoea and severe dehydration. Cholera affects both children and adults and can kill within hours if untreated.

### Ebola



Ebola virus disease (EVD) is a severe, often fatal illness affecting humans and other primates. The virus is transmitted to people from wild animals (such as fruit bats, porcupines and non-human primates) and then spreads in the human population through direct contact with the blood, secretions or other bodily fluids of infected people.

# Human papillomavirus (HPV)



HPV is a group of viruses that are extremely common worldwide. HPV is mainly transmitted through sexual contact and most people are infected with HPV shortly after the onset of sexual activity. HPV is the main cause of cervical cancer, which is the leading cause of cancer death among women in resource-poor countries where access to screening and treatment services is limited.

# Inactivated polio vaccine (IPV)



Poliomyelitis is a crippling and potentially fatal infectious viral disease spread through contaminated food and water that mainly affects children under the age of five. Areas with poor sanitation are especially prone to the spread of the polio virus. One in 200 infections leads to irreversible paralysis, usually in the legs. Among those paralysed, 5–10% die when their breathing muscles become immobilised. There is no cure for polio; it can only be prevented by immunisation.

# Japanese encephalitis (JE)



Japanese encephalitis virus (JEV), which is spread by mosquitoes, is the main cause of viral encephalitis in Asia. Case-fatality rates can be as high as 30%, with up to 50% of survivors suffering permanent disability.

### Measles



Measles is a highly contagious acute viral respiratory infection that remains a leading cause of death among young children globally. Serious complications include blindness, encephalitis (an infection that causes brain swelling), severe diarrhoea and related dehydration, ear infections, and severe respiratory infections such as pneumonia. More than 95% of measles deaths occur in countries with low per capita incomes and weak health infrastructures.

# Meningococcal A and meningococcal multivalent



Meningococcal meningitis is a bacterial form of meningitis, a serious infection of the thin lining that surrounds the brain and spinal cord. If untreated, meningococcal meningitis is fatal in 50% of cases and may result in brain damage, hearing loss or disability in 10–20% of survivors. Meningococcal meningitis is observed worldwide but the highest burden of the disease is in the meningitis belt of sub-Saharan Africa, stretching from Senegal in the west to Ethiopia in the east.

### Pneumococcal



An infection caused by the bacterium *Streptococcus pneumoniae* can lead to a range of illnesses including pneumonia, ear and sinus infections as well as more serious invasive infections of the bloodstream and fluids covering the brain and spinal cord causing meningitis. Pneumonia is the leading cause of death among children under five. Studies have shown that pneumococcal vaccination has led to a significant decrease in antibiotic-resistant pneumococcal infection.

# **DTP** boosters



Diphtheria, pertussis and tetanus containing boosters are given at 12–24 months, 4–7 years and 9–15 years. The three boosters offer continued protection from these diseases beyond the primary series administered in the first year of life.

### **Pentavalent**



The pentavalent vaccine protects against five major infections: diphtheria, tetanus, pertussis (whooping cough), hepatitis B and *Haemophilus influenzae* type b (Hib).

# Diphtheria

Diphtheria is a bacterial disease transmitted through direct physical contact or inhalation of aerosolised secretions. Infection can lead to difficulty breathing, heart failure, paralysis and death.

### **Tetanus**

Tetanus is a bacterial infection spread through direct contact with spores that naturally exist in the environment (e.g. in soil, dust and manure) and enter the body through broken skin or contaminated objects. While anyone not fully vaccinated can get tetanus, newborn babies and their mothers are at particular risk when deliveries take place at home without adequate sterile procedures. Tetanus requires emergency treatment and is usually fatal. Neonatal tetanus is almost always fatal.

### **Pertussis**

Pertussis is a highly contagious bacterial infection of the respiratory tract that is commonly known as "whooping cough".

Pertussis can affect people of all ages, but can be very serious, even deadly, for babies less than a year old.

## Hepatitis B

Hepatitis B is a viral disease transmitted via infected blood and other bodily fluids. Chronic infection with hepatitis B can lead to serious health issues such as cirrhosis or liver cancer. Hepatitis B virus is the leading cause of liver cancer and is 50 times more infectious than HIV.

# Haemophilis influenzae type B (Hib)

Hib, which is spread through infected respiratory droplets, is responsible for severe pneumonia, meningitis and other invasive diseases almost exclusively in children aged less than 5 years. Many survivors suffer paralysis, deafness and learning disabilities.

### **Rabies**



A virus that infects the central nervous system, rabies is 100% fatal if left untreated.

Transmission occurs through the saliva of infected animals, typically dogs, to people through scratches or bites. Rabies is 100% preventable through a combination of dog vaccination and post-exposure prophylaxis for humans that includes rabies immune globulin and human vaccine.

## Rotavirus



Rotavirus is a viral infection that spreads easily between infected and susceptible individuals, particularly children. Symptoms include severe diarrhoea, often with vomiting, fever and abdominal pain. In serious cases, children risk dying from dehydration. The rotavirus vaccine protects against the most common cause of diarrhoea in young children.

## Rubella



Transmitted in a similar manner as measles, rubella infection usually results in a milder illness. However, infection just before conception and in early pregnancy can result in miscarriage, fetal death or congenital defects known as congenital rubella syndrome (CRS).

# **Typhoid**



Typhoid fever is a potentially life-threatening disease caused by the bacteruim *Salmonella* Typhi potentially life-threatening bacterial infection (Salmonella typhi) that is spread through contaminated food or water and occurs predominantly in developing countries. An increase in antimicrobial resistance of the bacterium underlines the importance of prevention and the role of vaccines, alongside increased access to improved sanitation and clean water as well as treatment.

### Yellow fever



Yellow fever is a viral disease transmitted by infected mosquitoes. Large epidemics can occur when infected people introduce the virus into heavily populated areas with high mosquito density and low population immunity. The "yellow" in the name refers to the jaundice that affects some patients. A small proportion of patients who contract the virus develop severe symptoms and approximately half of those die within 7–10 days.

# EXPENDITURE TO MEET COUNTRY DEMAND, 2021–2025

2016–2020	Cash flow basis, US\$ million			2021–2025	
Total US\$ million	Programme	Existing programmes	Future demand	<b>Total</b> US\$ millions	% of total expenditure
	Vaccines				
2,402	Pneumococcal	1,141	163	1,304	13.9%
544	Pentavalent	348	0	348	3.7%
668	Rotavirus	497	60	558	6.0%
206	HPV	159	358	516	5.5%
263	Yellow fever	58	366	424	4.5%
376	Measles and rubella	22	271	294	3.1%
41	Typhoid	0	302	302	3.2%
20	Ebola	0	150	150	1.6%
77	CEPI	0	0	0	0.0%
133	Cholera	0	32	32	0.3%
169	Meningitis A	32	83	115	1.2%
9	Japanese encephalitis	2	8	9	0.1%
39	Other	55	0	55	0.6%
46	VIS vaccines	0	360	360	3.8%
495	IPV / polio	800	0	800	8.6%
5,488	Vaccine programmes	3,114	2,153	5,267	56.3%
0	Institutionalising post-transition support & exploring MICs	281	281	5,267	3.0%
2,161	Cash grant support	53	1,678	1,731	18.5%
951	Partners' Engagement Framework	913	-	913	9.8%
613	Operating expenses	659	-	659	7.0%
3,725	Investments in immunisation systems and enabling infrastructure	1,625	1,678	3,302	35.3%
9,123	Total Board approved programmes and expenses	4,739	4,112	8,851	94.7%
**	Board strategic investments	-	-	500	5.3%
9,213	Total Board approved programmes and expenses and strategic investments			9,351	100.0%
				\$9.4 bn	

<sup>\*\*</sup>Original Investment Case for 2016–2020 included a Provision of Strategic Investments of US\$ 500 million. Latest forecast captures new programmes (e.g. India, Ebola, MR etc.) within the individual programme lines

# ESTIMATED DEMAND FOR GAVI VACCINES, 2021–2025

Programme year basis (not cash-flow basis)

	US\$ million	
Africa	3,328	69%
Eastern Mediterranean	731	15%
South-East Asia	591	12%
Western Pacific	94	2%
Europe	51	1%
Americas	34	1%
Total	4,829	100%

By fragile status	US\$ million	
Fragile	1,047	22%
Non-fragile	3,782	78%
Total	4,829	100%

By IDA eligibility	US\$ million	
IDA-eligible	4,640	96%
Non IDA-eligible	189	4%
Total	4,829	100%

Non-country-specific amounts	US\$ million
VIS	360
Ebola	150
Stockpiles	121
Management adjustment (Typhoid)	-120
Total	5,340

# PROJECTED DEMAND FOR GAVI VACCINES BY COUNTRY, 2021-2025

Programme year basis (not cash-flow basis)	2021-2025	
	US\$ million	
African Region:	3,328	
Angola	17	
Benin	42	
Burkina Faso	99	
Burundi	32	
Cameroon	56	
Central African Republic	15	
Chad	41	
Comoros	2	
Congo, Democratic Republic	413	
Congo, Republic	3	
Côte d'Ivoire	46	
Eritea	11	
Ethiopia	468	
Gambia	9	
Ghana	48	
Guinea	39	
Guinea-Bissau	7	
Kenya	127	
Lesotho	4	
Liberia	22	
Madagascar	121	
Malawi	85	
Mali	108	
Mauritania	18	
Mozambique	134	
Niger	136	
Nigeria	374	
Rwanda	37	
São Tome and Principe	0	
Senegal	49	
Sierra Leone	20	
South Sudan	46	
Tanzania	241	
Togo	40	
Uganda	287	
Zambia	72	
Zimbabwe	60	

	US\$ million	
Eastern Mediterranean Region:	731	15%
Afghanistan	121	
Djibouti	2	
Pakistan	440	
Somalia	18	
Sudan	72	
Yemen	78	
		-

South-East Asia Region:	591	12%
Bangladesh	329	
Bhutan	0.2	
India	30	
Indonesia	60	
Korea, DPR	32	
Myanmar	71	
Nepal	67	
Sri Lanka	2	
Timor Leste	1	

Western Pacific Region:	94	2%
Cambodia	40	
Kiribati	0.04	
Lao PDR	7	
Mongolia	1	
Papua New Guinea	3	
Solomon Islands	0.5	
Vietnam	42	

European Region:	51	1%
Armenia	0.5	
Azerbaijan	2	
Kyrgyzstan	13	
Moldova	0.5	
Tajikistan	26	
Uzbekistan	9	

Region of the Americas	34	1%
Bolivia	3	
Cuba	1	
Guyana	0.2	
Haiti	25	
Honduras	2	
Nicaragua	2	

TOTAL (US\$ millions)	4,821	100%
-----------------------	-------	------

The country-level figures above do not include amounts for stockpiles or cash flow / other timing adjustments

Non-country-specific amounts	
VIS	360
Ebola	150
Stockpiles	121
Management adjustment (Typhoid)	-120
TOTAL:	5,340

Note: 1 – Cash flow equivalent US\$ 5,267 million.

2 –Based on financial projections as at June 2019.

# **GAVI ASSURED RESOURCES**

# **INCLUDES PLEDGES TO GAVI AND IFFIM FOR 2021–2025**

# **ALL AMOUNTS IN US\$ MILLION**

					C	Contributio	ns/pledges	1, 2, 5				
DONOR Sovereign donors & BMGF:	2000–2020			2016–2020			2021–2025					
	Direct <sup>3</sup>	AMC	IFFIm	Total	Direct <sup>3</sup>	AMC	IFFIm	Total	Direct <sup>3</sup>	AMC	IFFIm	Total
Australia	429	-	112	541	158	-	83	241	-	-	74	74
Bill & Melinda Gates Foundation	4,049	50	-	4,099	1,550	-	-	1,550	-	-	-	-
Brazil	-	-	3	3	-	-	3	3	-	-	5	5
Canada	681	200	-	881	410	-	-	410	-	-	-	-
China	5	-	-	5	5	-	-	5	-	-	-	-
Denmark	57	-	-	57	12	-	-	12	9	-	-	9
European Commission (EC)	342	-	-	342	250	-	-	250	-	-	-	-
France	255	-	884	1,139	109	-	386	495	-	-	658	658
Germany	912	-	-	912	704	-	-	704	-	-	-	-
Iceland	1	-	-	1	1	-	-	1	-	-	-	-
India	12	-	-	12	9	-	-	9	-	-	-	-
Ireland	63	-	-	63	17	-	-	17	-	-	-	-
Italy	118	635	399	1,152	118	211	140	468	-	-	175	175
Japan	148	-	-	148	95	-	-	95	-	-	-	-
Kingdom of Saudi Arabia	23	-	-	23	23	-	-	23	3	-	-	3
Kuwait	1	-	-	1	1	-	-	1	-	-	-	-
Luxembourg	16	-	-	16	5	-	-	5	-	-	-	-
Monaco	1	-	-	1	1	-	-	1	-	-	-	-
Netherlands	587	-	168	755	223	-	83	306	-	-	-	-
Norway	1,916	50	236	2,202	778	-	102	880	-	-	-	-
Oman	3	-	-	3	3	-	-	3	-	-	-	-
Qatar	10	-	-	10	10	-	-	10	-	-	-	-
Republic of Korea	29	-	-	29	22	-	-	22	5	-	-	5
Russian Federation	-	80	-	80	-	32	-	32	-	-	-	-
South Africa	-	-	11	11	-	-	4	4	-	-	5	5
Spain	43	-	159	202	-	-	51	51	-	-	60	60
Sweden	564	-	30	594	187	-	10	197	-	-	3	3
Switzerland	2	-	-	2	2	-	-	2	-	-	-	-
United Kingdom	3,000	485	1,482	4,967	1,378	146	854	2,378	-	-	1,013	1,013
United States of America	2,470	-	-	2,470	1,090	-	-	1,090	-	-	-	-
Sovereign donors & BMGF TOTAL	15,738	1,500	3,484	20,722	7,159	388	1,716	9,263	16	-	1,993	2,009
Private sector TOTAL <sup>4</sup>	244	-	-	244	78	-	-	78	-	-	-	-
TOTAL PLEDGES	15,983	1,500	3,484	20,967	7,237	388	1,716	9,341	16	-	1,993	2,009

The proceeds table (next page) indicates that the proceeds that Gavi expects to receive from the amounts pledged per the table above.

- Notes: 1 Some contributions may be received by Gavi in years different to those for which pledges were made.
- 2 FX rates as of 31 March 2019.
- 3 Direct Contributons include contributions via the Matching Fund.
- 4 In-kind contributions are not included in the Private Sector total above.
- 5 Pledges to Gavi and IFFIm made through 31 March 2019.

# **GAVI ASSURED RESOURCES**

# PROCEEDS TO GAVI FROM PLEDGES FOR 2021–2025

## **ALL AMOUNTS IN US\$ MILLION**

						Gavi res	ources <sup>1, 2, 8,</sup>					
DONOR Sovereign donors & BMGF:		2000–	2020			2016–	2020			202 <sup>.</sup>	1–2025	
Sovereigh donors & bividi.	Direct <sup>3</sup>	AMC	IFFIm	Total	Direct <sup>3</sup>	AMC	IFFIm	Total	Direct <sup>3</sup>	AMC	IFFIm	Total
Australia	429		116	545	158	-	78	236	-	-	37	37
Bill & Melinda Gates Foundation	4,049	50	-	4,099	1,550	6	-	1,556	-	-		-
Brazil			10	10	-	-	10	10	-	-	8	8
Canada	681	200	-	881	410	26	-	435	-	-	-	-
China	5		-	5	5	-	-	5	-	-	-	-
Denmark	57		-	57	12	-	-	12	9	-	-	9
European Commission (EC)	342		-	342	250	-	-	250	-	-	-	-
France	255		1,088	1,343	135	-	400	535	-	-	273	273
Germany	912		-	912	688	-	-	688	-	-	-	-
Iceland	1		-	1	1	-	-	1	-	-	-	-
India	12		-	12	9	-	-	9	-	-	-	-
Ireland	63		-	63	17	-	-	17	-	-	-	-
Italy .	118	635	375	1,128	118	265	101	484	-	-	59	59
Japan	148		-	148	95	-	-	95	-	-	-	-
Kingdom of Saudi Arabia	23		-	23	23	-	-	23	3	-	-	3
Kuwait	1		-	1	1	-	-	1	-	-	-	-
Luxembourg	16		-	16	5 1	-	-	5 1	-	-	-	-
Monaco  Netherlands	587		135	722	223		73	296	-			
Norway	1,916	50	176	2,142	778	6	41	825			<u> </u>	
Oman	3	30	- 170	3	2	-	-	2	<u> </u>			
Qatar	10		_	10	10	_		10				
Republic of Korea	29		_	29	22	_	_	22	5	_	_	5
Russian Federation		80	_	80	_	38	_	38	-	_	-	-
South Africa			11	11	-	-	3	3	-	-	2	2
Spain	43		132	175	-	-	33	33	-	-	19	19
Sweden	564		22	586	187	-	5	192	-	-	1	1
Switzerland	2		-	2	2	-	-	2	-	-	-	-
United Kingdom	3,000	485	1,726	5,211	1,378	189	570	2,137	-	-	362	362
United States of America	2,470		-	2,470	1,090	-	-	1,090	-	-	-	-
Sovereign donors & BMGF TOTAL	15,738	1,500	3,791	21,029	7,167	530	1,314	9,011	16		761	777
Private sector TOTAL <sup>4</sup>	244		-	244	78	-	-	78	-	-	-	-
TOTAL PLEDGES	15,983	1,500	3,791	21,274	7,245	530	1,314	9,090	16	-	761	777
Forecast alignment	-	-	-	-	-62	-	-	-62	-	-	-	-
IFFIm strategic deferrals <sup>5</sup>	-	-	-714	-714	-	-	-714	-714	-	-	714	714
TOTAL PLEDGES (NET)	15,983	1,500	3,077	20,560	7,183	530	600	8,313	16	-	1,475	1,491
				e forecast)				232			_	125
				ents reserv	e			370			_	384
		ked funds <sup>6</sup>					-	268			_	
	Other <sup>7</sup>						-	111			_	
	ACCURE	DECOLIDOR						0.204				2.000
	ASSURED	RESOURCE	3					9,294				2,000 \$2.0 bn
								\$9.3 bn				\$2.U DN

Notes:

1 – Some contributions may be received by Gavi in years different to those for which pledges were made.

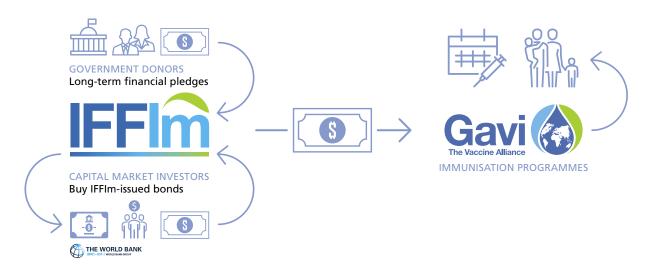
- 2 FX rates as of 31 March 2019.
- 3 Direct Contributons include contributions via the Matching Fund.
  4 In-kind contributions are not included in the Private Sector total above.
- 5 Strategic deferrals refer to IFFIm proceeds initially planned to be disbursed during the current Strategic Period that have been reallocated to the next Strategic Period. A negative figure indicates an increase in funds to be disbursed in the next Strategic Period, while a positive figure indicates allocation of previously deferred funds within that year's disbursements.

(for 2016-2020)

(for 2021-2025)

- 6 Earmarked funds received through 2019 from BMGF, Norway and United Kingdom
- 7 Other: Includes CEPI funding provided by Norway of NOK 600m / \$77m received in 2019 8 Proceeds to Gavi from pledges for 2021-2025 made through 31 March 2019.
- 9 IFFIm proceeds allocation updated June 2019 based on updated assumptions from the World Bank.

# **IFFIM AND VACCINE BONDS**



### **VACCINE BONDS**

The International Finance Facility for Immunisation (IFFIm) uses long-term pledges from donor governments to sell "vaccine bonds" in the capital markets, making large volumes of funds immediately available for Gavi programmes.

Launched in 2006, IFFIm was the first aid-financing entity in history to attract legally-binding commitments of up to 20 years from donors and offers the "predictability" that developing countries need to make long-term budget and planning decisions about immunisation programmes.

### AUGMENTING EXISTING SUPPORT

IFFIm has transformed Gavi's financial landscape, nearly doubling Gavi's funding for immunisation programmes in the initial years of IFFIm's operations.

IFFIm benefits from US\$ 6.5 billion in donor contributions received over more than 30 years from the governments of Australia, Brazil, France, Italy, the Netherlands, Norway, South Africa, Spain, Sweden and the United Kingdom.

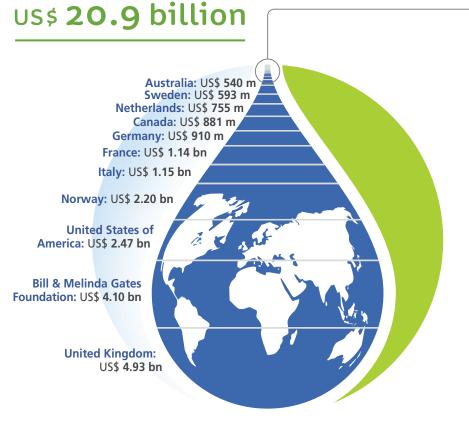
These long-term pledges support the issuance of vaccine bonds and sukuks, which have been issued in various markets and various currencies and have proved remarkably popular with institutional and individual investors who want a market-based return and an ethical investment opportunity.

With the World Bank as its treasury manager, IFFIm has leveraged donor pledges to raise more than US\$ 6 billion over the 2006 to 2018 period.

The existence of IFFIm allowed 80 million children to be vaccinated before donor funds were received, and allows flexibility to move funds over time as they are needed, for instance in an emergency situation, and governments to flex budgets towards near-term priorities, such as the essential work of the Coalition for Epidemic Preparedness (CEPI), and to pay for programmes more smoothly over time and lock in avoidance of currency fluctuation.

# **GAVI FUNDERS**

# **TOTAL DONOR CONTRIBUTIONS AND PLEDGES, 2000–2020**



Figures as of 30 June 2019. In-kind contributions are not included in this graphic. Some commitments are funded through proceeds from the International Finance Facility for Immunisation and the Advanced Market Commitment. Foreign exchange rates as of 30 June 2019.

US\$ 2 m US\$ 2 m US\$ 1 m US\$ 0.6 m

	1		1		
European Commission:	US\$ <b>340 m</b>	Comic Relief:	US\$ <b>28 m</b>	Oman:	US\$ <b>3 m</b>
Spain:	US\$ <b>202 m</b>	Saudi Arabia:	US\$ <b>23 m</b>	Brazil:	US\$ 3 m
Japan:	US\$ <b>149 m</b>	Luxembourg:	US\$ <b>17 m</b>	Switzerland:	US\$ 2 m
Russian Federation:	US\$ <b>80 m</b>	India:	US\$ <b>12 m</b>	International Federation of	
Ireland:	US\$ <b>62 m</b>	South Africa:	US\$ <b>12 m</b>	Pharmaceutical Wholesalers:	US\$ <b>2 m</b>
Denmark:	US\$ <b>57 m</b>	LDS Charities:	US\$ 11 m	China Merchants	
HH Sheikh Mohamed		Qatar:	US\$ 10 m	Charitable Foundation:	US\$ <b>2 m</b>
bin Zayed Al Nahyan:	US\$ 38 m	Audacious Alliance:	US\$ 9 m	UBA Foundation:	US\$ <b>2 m</b>
"la Caixa" Foundation:	US\$ <b>37 m</b>	Red Nose Day Fund:	US\$ <b>7 m</b>	Reckitt Benckiser Group:	US\$ 1 m
Children's Investment		China:	US\$ <b>5 m</b>	Al Ansari Exchange:	US\$ 1 m
Fund Foundation:	US\$ <b>32 m</b>	Girl Effect:	US\$ 4 m	Alwaleed Philanthropies:	US\$ 1 m
Other donors (total):	US\$ <b>32 m</b>	Mastercard:	US\$ 4 m	Iceland:	US\$ 1 m
Lions Clubs International		ELMA Vaccines and		Kuwait:	US\$ 1 m
Foundation:	US\$ <b>30 m</b>	Immunization Foundation:	US\$ 4 m	Principality of Monaco:	US\$ 0.6 m
Republic of Korea:	US\$ <b>29 m</b>	Unilever:	US\$ <b>3 m</b>		

### DONOR GOVERNMENTS AND THE EUROPEAN COMMISSION

Australia, Brazil, Canada, Denmark, the European Commission, France, Germany, Iceland, India, Ireland, Italy, Japan, the Kingdom of Saudi Arabia, Luxembourg, the Netherlands, Norway, the People's Republic of China, the Principality of Monaco, the Republic of Korea, the Russian Federation, South Africa, Spain, the State of Qatar, the Sultanate of Oman, Sweden, Switzerland, the United Kingdom, the United States of America.

### FOUNDATIONS, ORGANISATIONS AND CORPORATIONS

Alwaleed Philanthropies, Absolute Return for Kids, ActionAid International, Af Jochnick Foundation, Al Ansari Exchange, Anglo American plc., Audacious Alliance, Bill & Melinda Gates Foundation, Botnar Foundation, Children's Investment Fund Foundation, China Merchants Group, Comic Relief, Deutsche Post DHL, Dutch Postcode Lottery, ELMA Vaccines and Immunization Foundation, Girl Effect, Gogel Family Foundation, Google.org, Gulf Youth Alliance, His Highness Sheikh Mohamed bin Zayed Al Nahyan, JP Morgan, IKARE Limited, International Federation of Pharmaceutical Wholesalers, Kuwait Fund for Arab Economic Development, "la Caixa" Foundation, LDS Charities, Lions Clubs International Foundation, Mastercard, Majid Al Futtaim, OPEC Fund for International Development, Orange, Philips, Reckitt Benckiser, Red Nose Day Fund, Swedish Postcode Foundation, Tencent Holdings, UBA Foundation, Unilever, UPS, Unorthodox Philanthropies, Vodafone.

# ADDITIONAL INFORMATION

## **Gavi Board**

www.gavi.org/about/governance/gavi-board/

# More information on Gavi's resource mobilisation

www.gavi.org/funding/how-gavi-is-funded/resource-mobilisation-process/

## Key figures: donor contributions & pledges

www.gavi.org/funding/donor-contributions-pledges/

# **Gavi donor profiles**

www.gavi.org/funding/donor-profiles/

## The Gavi Mid-Term Review report

www.gavi.org/library/publications/gavi/gavi-2016-2020-mid-term-review-report/

## Gavi country hub

Detailed information on Gavi-supported countries. www.gavi.org/country/

## **Gavi Secretariat Senior Leadership**

www.gavi.org/about/governance/secretariat/

# **Transparency and Accountability Policy**

www.gavi.org/about/governance/programme-policies/tap/

## **Financial reports**

www.gavi.org/funding/financial-reports/

### **Technical appendix**

Detailed information on the methodology used to estimate the impact projections presented in the Investment Opportunity.

www.gavi.org/investment-case-technical-appendix/

Notes	