



## Facts & figures

The evidence is clear: vaccines are one of the most cost-effective investments in health and development in history. Gavi helps save children's lives and protect people's health by increasing equitable use of vaccines in lower-income countries.

### Gavi helps vaccinate almost half of the world's children

60% of the global birth cohort live in Gavi-supported countries. Gavi's work increasing immunisation coverage in those countries means we now help vaccinate 49% of children globally.

### Over 13 million lives saved in the long term

Since its inception in 2000 through the end of 2018, Gavi helped lower-income countries to prevent more than 13 million future deaths through its support for routine immunisation programmes and vaccination campaigns. *Vaccine Impact Modelling Consortium (VIMC), July 2019 update*

### More than 760 million children vaccinated through routine programmes

From 2000 through 2018, Gavi support contributed to the vaccination of more than 760 million unique children through routine immunisation and to more than 960 million campaign immunisations. *WHO/UNICEF 2019*

### 81% coverage with DTP3

Coverage with three doses of diphtheria-tetanus-pertussis-containing vaccine (DTP3), including pentavalent vaccine, in Gavi-supported countries was 81% in 2018 – just 5 percentage points below the global average. This represents an increase of 22 percentage points since 2000.

*WHO/UNICEF 2019*

### 66 million children immunised in 2018

In 2018, 66 million children were immunised with Gavi-supported vaccines. Between 2016 and 2018, Gavi immunised 198 million children, putting us well on target to immunise 300 million children by 2020. Immunisation is often a key component in forging contact between children and the primary health care system, as well as providing a robust platform for other health interventions. *WHO/UNICEF 2019*

### Health systems strengthened in 69 countries

The Vaccine Alliance has helped strengthen health systems and immunisation services in 69 countries, and has provided 48 countries with cold chain equipment support.

### More than 490 vaccine launches by end 2019

Gavi has supported 496 vaccine introductions and campaigns since 2000.

### Return on investment of immunisation in Gavi-supported countries<sup>1</sup>: US\$ 54 for US\$ 1 spent

An updated study by Johns Hopkins University covering the 73 Gavi-supported countries over the 2021–2030 period shows that, for every US\$ 1 spent on immunisation, US\$ 21 are saved in health care costs, lost wages and lost productivity due to illness and death. When considering the value people place on lives saved by vaccines – which is likely to include the value of costs averted plus the broader societal value of lives saved and people living longer and healthier lives – the return on investment is estimated to be US\$ 54 per US\$ 1 spent. *Johns Hopkins University 2019*

### Over US\$ 150 billion generated through economic benefits

By preventing illness, death and long-term disability, Gavi-supported vaccines helped generate more than US\$ 150 billion in economic benefits between 2000 and 2017. *Constenla et al. Estimating the economic impact of vaccinations in 73 resource-constrained countries, 2001–2030*

### Fifteen countries have transitioned out of Gavi support

By early 2019, 15 countries had transitioned to fully self-financing their vaccine programmes. We expect three additional countries to transition out of Gavi support by the end of 2020.<sup>2</sup>

Data sources for this document, unless otherwise stated:

Gavi, the Vaccine Alliance; World Health Organization (WHO); WHO/UNICEF; UNICEF Supply Division; CDC vaccine price list.

<sup>1</sup> The updated study also looked at the investment return in the world's 94 lowest-income countries. For every US\$ 1 spent on immunisation in these countries, US\$ 20 are saved in health care costs, lost wages and lost productivity due to illness and death. When considering the value people place on lives saved by vaccines – which is likely to include the value of costs averted plus the broader societal value of lives saved and people living longer and healthier lives – the return on investment is estimated to be US\$ 52.

<sup>2</sup> Does not include countries that have previously received Gavi support but did not transition under the current policy (Albania, Bosnia-Herzegovina, China, Turkmenistan and Ukraine). Although 16 countries were fully self-financing in 2018, the Gavi Board approved Congo to regain eligibility as of 1 January 2019.

## Vaccine support

Through routine immunisation programmes, preventive campaigns and emergency stockpiles, Gavi supports vaccines against 17 infectious diseases.

### **Pentavalent vaccine: 73 countries, over 467 million children, 5 antigens**

In July 2014, South Sudan became the final Gavi-supported country to introduce the five-in-one pentavalent vaccine. By the end of 2018, over 467 million children had been immunised with pentavalent vaccine with Gavi support.

### **Over 183 million children vaccinated against pneumococcal disease**

By the end of 2018, 59 Gavi-supported countries had immunised more than 183 million children against pneumococcal disease with support from the Vaccine Alliance.

### **More than 100 million children vaccinated against rotavirus**

Our support has contributed to immunising over 100 million children against rotavirus diarrhoea. By the end of 2018, 45 countries had introduced the vaccine with support from the Vaccine Alliance.

### **296 million people reached by meningococcal meningitis A campaigns**

By the end of 2018, 296 million people had been vaccinated against meningitis A through Gavi-supported preventive mass campaigns in the African “meningitis belt” – with an additional 9 million reached through routine immunisation. By the end of 2019, 10 out of the 26 countries in the belt added the vaccine to their national schedules.

### **Meningitis A, C, W, Y vaccine stockpile prevents outbreaks**

Gavi funds a stockpile of multivalent vaccine to prevent outbreaks of meningitis A, C, W and Y. From 2009 through the end of 2018, the stockpile had been accessed 50 times by 14 countries, with over 21 million doses distributed. In 2018, the stockpile was accessed by Fiji and Nigeria to help manage outbreaks of the disease.

### **Typhoid vaccine: new funding window**

Typhoid conjugate vaccines were Board-approved in late 2017; applications opened mid-2018; and since then, three countries have applied for support. One request was also approved for TCV use in outbreak response. The first Gavi-supported introduction and catch-up campaign began in 2019.

### **14 million girls to be reached with human papillomavirus vaccine by end 2020**

By the end of 2020, it is expected that 14 million girls will have been vaccinated against HPV in 24 countries with support from Gavi.

### **112 million children immunised against polio**

In September 2014, Nepal became the first country to introduce inactivated polio vaccine (IPV) with Gavi support; by the end of 2018, Gavi had immunised more than 112 million children. As of April 2019, all Gavi-supported countries had introduced IPV into their routine immunisation programmes.

### **Over 76 million reached with a second dose of measles vaccine**

Since 2007, countries have immunised over 76 million children with a second dose of measles vaccine and over 42 million with a first and/or second dose of measles-rubella vaccine through Gavi-supported routine immunisation programmes. Gavi-funded campaigns with these two vaccines have helped vaccinate another 524 million children in countries at high risk of outbreaks.

### **Yellow fever vaccine: mass prevention campaigns and routine immunisation**

Since 2011, Gavi-supported campaigns in 14 countries have protected more than 133 million people, while routine introductions have reached over 117 million people. Gavi has helped 17 countries introduce yellow fever vaccine through routine immunisation. The yellow fever stockpile has saved countless lives; since its launch, over 62 million doses had been distributed through the end of 2018.

### **Oral cholera vaccine stockpile: over 35 million doses distributed**

Gavi began supporting the global oral cholera vaccine stockpile in 2014. Since its creation in 2013 to support emergency response, humanitarian crises and preventive vaccination in countries with endemic cholera, the stockpile has been accessed 76 times by 24 countries, with over 35 million doses distributed. Cholera vaccine is viewed as a critical tool to support prevention and control of cholera as part of a multisectoral strategy. A clear indication: in 2018, oral cholera vaccine use increased by 75% compared with 2017, and over 17 million doses of the vaccine were shipped with Gavi support.

### **Over 18 million children vaccinated against Japanese encephalitis**

In April 2015, the Lao People’s Democratic Republic became the first country to introduce Japanese encephalitis (JE) vaccine with Gavi funding. By the end of 2018, 1,655,362 million children had been immunised against JE through Gavi-supported routine programmes, while 16,676,510 million had been reached through vaccination campaigns, resulting in over 18 million children in total being vaccinated.

## Burden of disease, coverage and equity

While we continue to help countries introduce new vaccines, our focus is expanding. Reaching every child is at the heart of Gavi's next five-year plan, helping to deliver vaccines to people who need them everywhere, regardless of their gender, ethnic or social identity.

### **1.5 million people lose their lives to vaccine-preventable diseases every year**

Over the past two decades, Gavi has helped protect a generation against some of the world's deadliest diseases. However, 1.5 million people are still dying from vaccine-preventable diseases, while climate change, conflict and urbanisation are combining to make it easier for outbreaks to spread. *WHO 2019*

### **19.4 million under-immunised**

19.4 million children worldwide miss out on basic vaccines. 78% of these children live in Gavi-supported countries. *WHO/UNICEF 2019*

### **89% of children under 12 months miss out on all the WHO-recommended vaccines**

Only 11% of children receive the last recommended dose of each of the 11 antigens currently recommended by WHO for all infants worldwide by their first birthday. *WHO/UNICEF 2018*

### **More than 10 million children in Gavi countries receive no routine vaccinations at all**

In Gavi-supported countries, approximately 20% of children are under-immunised – they have not received all three doses of the essential childhood vaccine containing DTP. Of these, we estimate that between one-quarter and one-half are “zero-dose” children – they have not received *any* doses of DTP-containing vaccine. In Gavi-supported countries, there are still 10.4 million zero-dose children – down from 18.9 million in 2000. *WHO/UNICEF 2019*

### **Focus on 20 priority countries**

In the 2016–2020 period, we are intensifying our efforts in 20 priority countries. Ten of these – Afghanistan, Chad, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Kenya, Nigeria, Pakistan and Uganda – account for over 70% of the under-immunised children in Gavi-supported countries, so improving their immunisation coverage is critical.

We are also prioritising an additional 10 countries, which face severe inequities or crises: Central African Republic, Haiti, Madagascar, Mozambique, Myanmar, Niger, Papua New Guinea, Somalia, South Sudan and Yemen. *WHO/UNICEF 2019*

### **Nearly a quarter of child deaths are due to pneumonia and diarrhoea**

Pneumonia and diarrhoea account for nearly a quarter of deaths in under-fives in Gavi-supported countries. *MCEE-WHO methods and data sources for child causes of death 2000-2017*

### **Gender-related barriers can prevent children from being immunised**

A WHO study found no significant difference in immunisation coverage rates for boys and girls at the global level. Yet in some countries and communities, gender discrimination means that boys have greater access to vaccines than do girls. In others, the opposite is true – girls have greater access. In societies where women have low status and therefore lack access to immunisation and other health services, both girls and boys are less likely to be immunised. *WHO 2018*

### **One woman dies every two minutes from cervical cancer**

Globally, one woman dies of cervical cancer approximately every two minutes. With 311,000 deaths a year, it now kills more women than pregnancy complications and childbirth combined. Approximately 90% of these deaths occurred in low- and middle-income countries. HPV vaccines can prevent up to 90% of all cervical cancer cases. *WHO 2019*

### **100,000 babies born with birth defects due to rubella**

Every year, 100,000 babies are born with severe birth defects known as congenital rubella syndrome because their mothers were infected with rubella during pregnancy – the vast majority in Gavi-supported countries. The combined measles-rubella vaccine, which Gavi supports, can prevent this devastating disease. *PLOS ONE 2016*

## Healthy vaccine markets

### **Pentavalent, pneumococcal and rotavirus vaccines: 21% price reduction since 2015**

By the end of 2018, the cost of fully immunising a child with pentavalent, pneumococcal and rotavirus vaccines averaged US\$ 15.90. This represents a reduction of 21% relative to the 2015 baseline figure of US\$ 20.01 and 4% drop from the 2017 price of US\$ 16.63.

### **Pentavalent (DTP-hepB-Hib) vaccine: a reduction of 70% to US\$ 0.90 per dose**

The weighted average price of pentavalent vaccine per dose dropped from US\$ 2.98 in 2010 to US\$ 0.90 in 2018; however, it was expected to increase to US\$ 0.93 in 2019 following the decision by some manufacturers to increase their prices.

### **Human papillomavirus (HPV) vaccine: two-thirds reduction to US\$ 4.50**

In 2013, a price of US\$ 4.50 per dose for one type of HPV vaccine was agreed – a two-thirds reduction on the previous lowest public price. The rise in country demand for the vaccine is currently outpacing supply. Gavi is working with countries to help adjust the timing of introductions and with manufacturers to scale up production capacity.

### **Inactivated polio vaccine (IPV): ensuring sufficient supply**

After a period of supply shortages, sufficient quantities of IPV are now available to cover routine demand in Gavi-supported countries. While an important price increase was seen in 2019 due to significant scale-up costs, the weighted average price is expected to drop with the arrival of new suppliers.

### **Pneumococcal vaccines through the AMC: less than 5% of the US public price**

Through the Advance Market Commitment (AMC), pneumococcal vaccines are available to Gavi-supported countries at no more than US\$ 3.50 per dose – less than 5% of the public price in the United States of America. By early 2019, Gavi had secured a lowest price offer from one of its pneumococcal vaccine suppliers of US\$ 2.90 per dose.

### **Manufacturing base grown from 5 to 17 – more than half based in Africa, Asia, Latin America**

In 2001, five vaccine manufacturers produced prequalified, appropriate Gavi vaccines, with only one based in Africa. In 2018, 17 vaccine manufacturers produced prequalified, appropriate Gavi vaccines, with 11 based in Africa, Asia and Latin America.

### **Rotavirus vaccine: lowest price of US\$ 0.85 per dose**

Thanks to long-term supply agreements with manufacturers, Gavi has been able to secure prices below US\$ 1 per dose for two types of rotavirus vaccine (US\$ 0.85 and US\$ 0.95 per dose). This is less than 2% of the 2019 public price in the United States of America (US\$ 70.49 per dose). Supply constraints had disrupted the efforts of some governments to introduce the vaccine in 2018–2019; however, extensive Alliance collaboration helped mitigate the issue, and the market's resilience is improving with the prequalification of new vaccine products.

## Looking ahead

### **Accelerating impact**

Between 2016 and 2020, Gavi will help countries to immunise another 300 million children against potentially fatal diseases, saving between 5 and 6 million lives in the long term.

### **Towards universal health coverage**

Routine immunisation currently reaches 86% of the world's children. It is the only intervention that brings the vast majority of families into contact with the health system five or more times during the first year of a child's life. If we expand this reach further, we have a solid platform for universal health coverage.

### **18 countries to transition out of Gavi support by end 2020**

Gavi continues to help countries to build sustainable immunisation programmes. By early 2019, 15 countries had transitioned to fully self-financing their vaccine programmes. We expect three additional countries to transition out of Gavi support by the end of 2020.

### **Vaccines prevent poverty**

According to a study published in *Health Affairs* in 2018, vaccines administered between 2016 and 2030 will prevent 24 million people in 41 of the world's poorest countries from falling into poverty.

*Harvard University 2018*