



# IMMUNIZATION AGENDA 2030

A global strategy to leave no one behind



The background is a solid yellow color. Overlaid on this are several concentric white circles of varying diameters, centered on the page. The circles are thin and create a subtle, modern graphic design.

# CONTENTS

<b>At a glance</b>	<b>4</b>
<b>Introduction</b>	<b>6</b>
<b>1. The case for immunization</b>	<b>10</b>
1.1 Saving lives and protecting the health of populations	12
1.2 Improving countries' productivity and resilience	12
1.3 Ensuring a safer, healthier, more prosperous world	13
<b>2. A strategy for the future</b>	<b>16</b>
2.1 Lessons from the Global Vaccine Action Plan	18
2.2 Lessons from disease-specific initiatives	19
2.3 The changing context and challenges	22
2.4 What is new on the 2030 agenda?	24
<b>3. A framework for action</b>	<b>28</b>
<b>Strategic priority 1.</b> Immunization programmes for primary health care and universal health coverage	32
<b>Strategic priority 2.</b> Commitment and demand	34
<b>Strategic priority 3.</b> Coverage and equity	36
<b>Strategic priority 4.</b> Life-course and integration	38
<b>Strategic priority 5.</b> Outbreaks and emergencies	40
<b>Strategic priority 6.</b> Supply and sustainability	42
<b>Strategic priority 7.</b> Research and innovation	44
<b>4. Impact and strategic goals</b>	<b>46</b>
<b>5. Operationalization</b>	<b>54</b>
5.1 Operational plans	56
5.2 Ownership and accountability	57
5.3 Monitoring and evaluation framework	57
<b>References</b>	<b>58</b>

# AT A GLANCE

## Vision



---

**A world where everyone,  
everywhere, at every age...**

---

**... fully benefits from  
vaccines...**

---

**... for good health  
and well-being**

## Impact goals



---

Reduce mortality and morbidity from vaccine-preventable diseases for everyone throughout the life course.

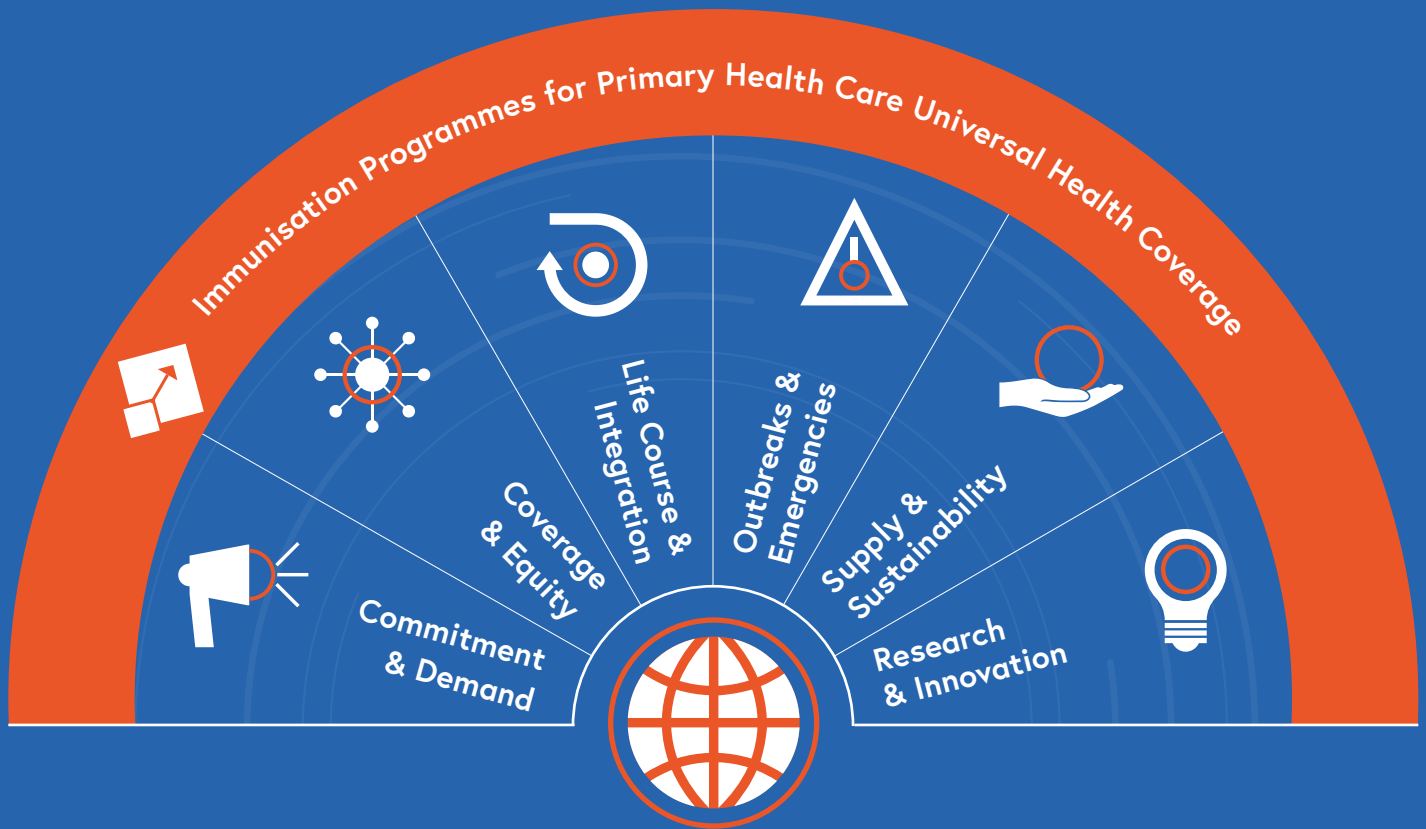
---

Leave non one behind, by increasing equitable access and use of new and existing vaccines.

---

Ensure good health and well-being for everyone by strengthening immunisation within primary health care and contributing to universal health coverage and sustainable development.

# Strategic priorities



# Core principles



People  
Centred



Country  
Owned



Partnership  
Based



Data  
Guided

# INTRODUCTION

Immunization is a success story for global health and development, saving millions of lives every year. Between 2010 and 2018, 23 million deaths were averted with measles vaccine alone (1). The number of infants vaccinated annually – more than 116 million, or 86% of all infants born – has reached the highest level ever reported. More than 20 life-threatening diseases can now be prevented by immunization (2). Since 2010, 116 countries have introduced vaccines that they did not use previously (3), including those against major killers like pneumococcal pneumonia, diarrhoea, cervical cancer, typhoid, cholera and meningitis.

Furthermore, there has been much innovation in vaccine development. There are now vaccines to protect against malaria, dengue and Ebola virus disease, and promising vaccines against respiratory syncytial virus, tuberculosis and all influenza virus strains are in the pipeline. New research on broadly neutralizing antibodies and therapeutic vaccines is opening fresh horizons. Increasingly, vaccines are protecting health beyond infancy – in adolescence and adulthood, during pregnancy and for older people.

Innovative ways are being found to distribute and administer vaccines and to improve immunization services. Digital tools, new, needle-free techniques for vaccine administration and more robust vaccine storage and supply chains promise to transform immunization programmes<sup>1</sup> over the next decade. Timely access to reliable data will provide new opportunities for national programmes to monitor and continuously improve their performance, reach and efficiency.

Vaccines are critical to the prevention and control of many communicable diseases and therefore underpin global health security. Moreover, they are widely seen as critical for addressing emerging infectious diseases, for example by containing or limiting outbreaks of infectious diseases or combatting the spread of antimicrobial resistance. Regional outbreaks (e.g. of Ebola virus disease), the COVID-19 pandemic and the threat of future pandemics (such as with a novel flu strain) have and will continue to strain even the most resilient health systems. A clear risk is a reduction in essential services and particularly vaccination and prevention of other communicable diseases. Countries should

---

1. Throughout this document, the term "immunization programme" is used to reflect shifts in both language and thinking. First, as immunization programmes are only one component of health systems, the term aligns the global vision and strategy with the broader health and development agenda. Secondly, the term is more comprehensive than the more commonly used "routine immunization," which does not capture the full spectrum of an immunization programme's activities, such as "catch-up" vaccinations, periodic intensification of vaccination activities or efforts to address missed opportunities for vaccination.

identify essential services that to be prioritized and maintained during emerging infectious disease threats and move as soon as feasible to provide missed vaccinations. In the longer term, intensive, collaborative investments in research and development and equitable supplies of new vaccines are likely to be part of the solution to averting recurrences.

Nevertheless, important challenges remain. The benefits of immunization are unevenly shared: coverage varies widely among and within countries. Some populations – often the poorest, the most marginalized and the most vulnerable, in fragile, conflict-torn settings – have poor access to immunization services. Each year, 20 million infants do not receive a full course of even basic vaccines, and many more miss out on newer vaccines. Of these, over 13 million receive no vaccines through immunization programmes – the "zero dose" children.

In some countries, progress has stalled or even reversed, and the risk that complacency will undermine past achievements is real. Outbreaks of measles and vaccine-derived polioviruses are stark reminders that strong immunization programmes and effective disease surveillance are necessary to sustain high levels of coverage and to eliminate and eradicate diseases. Because measles is highly infectious, its presence serves as a tracer (the "canary in the coal mine") of inadequate coverage and gaps in the health system. Detection of measles cases through surveillance reveals communities and age groups that are un- or under-immunized and immunization programmes and overall primary health care systems that are inadequate, indicating where particular attention and interventions are needed. High coverage with measles vaccine is an indicator of a strong immunization programme, which may signal a solid foundation for primary health care services. The second dose of measles vaccine is an opportunity to enhance focus on strengthening immunization programmes to reach children beyond the first year of life and to broaden immunization services throughout the life-course.

If all people are to access immunization services, vaccines must be delivered to areas that are isolated geographically, culturally, socially or otherwise and to marginalized populations such as displaced people and migrants and those affected by conflict, political instability and natural disasters. The causes of low vaccine use must be understood and addressed in order to increase people's demand for immunization services. Adequate, predictable supplies of appropriate, affordable vaccines of assured quality must be available at points of service delivery, and stock-outs must be avoided. Tailored strategies are necessary for understanding and overcoming barriers to vaccination, particularly gender-related barriers of caregivers and health workers to accessing immunization services. New approaches are required to reach older age groups and to deliver people-centred immunization services, integrated with primary health care.

The **Immunization Agenda 2030** (IA2030) sets an ambitious, overarching global vision and strategy for vaccines and immunization for the decade 2021–2030. It draws on lessons learnt, acknowledges continuing and new challenges posed by infectious diseases and capitalizes on new opportunities to meet those challenges. IA2030 positions immunization as a key contributor to people's fundamental right to the enjoyment of the highest attainable physical and mental health and also as an investment in the future, creating a healthier, safer, more prosperous world for all. IA2030 aims to ensure that we maintain the hard-won gains and also that we achieve more – leaving no one behind, in any situation or at any stage of life.

IA2030 is intended to inspire and align the activities of community, national, regional and global stakeholders – national governments, regional bodies, global agencies, development partners, health care professionals, academic and research institutions, vaccine developers and manufacturers, the private sector and civil society. Its impact will be maximized by more effective and efficient use of resources, innovation to improve performance and measures to attain financial and programmatic sustainability. Success will depend on building and strengthening partnerships within and outside the health sector as part of a coordinated effort to improve access to high-quality, affordable primary health care, achieve universal health coverage and accelerate progress towards the 2030 Sustainable Development Goals (SDGs).

IA2030 provides a long-term strategic framework to guide a dynamic operational phase, responding to changes in country needs and the global context over the next decade. This document is therefore just the beginning. The IA2030 global vision and strategy will be complemented by annexes providing detailed technical information on the strategic framework, together with new and existing strategies and immunization plans, including those for disease-specific programmes to control, eliminate or eradicate disease. IA2030 will become operational through regional and national strategies, a mechanism to ensure ownership and accountability and a monitoring and evaluation framework to guide country implementation.

Through collective endeavour by all stakeholders, we will achieve the vision for the decade: *A world where everyone, everywhere, at every age, fully benefits from vaccines for good health and well-being.*

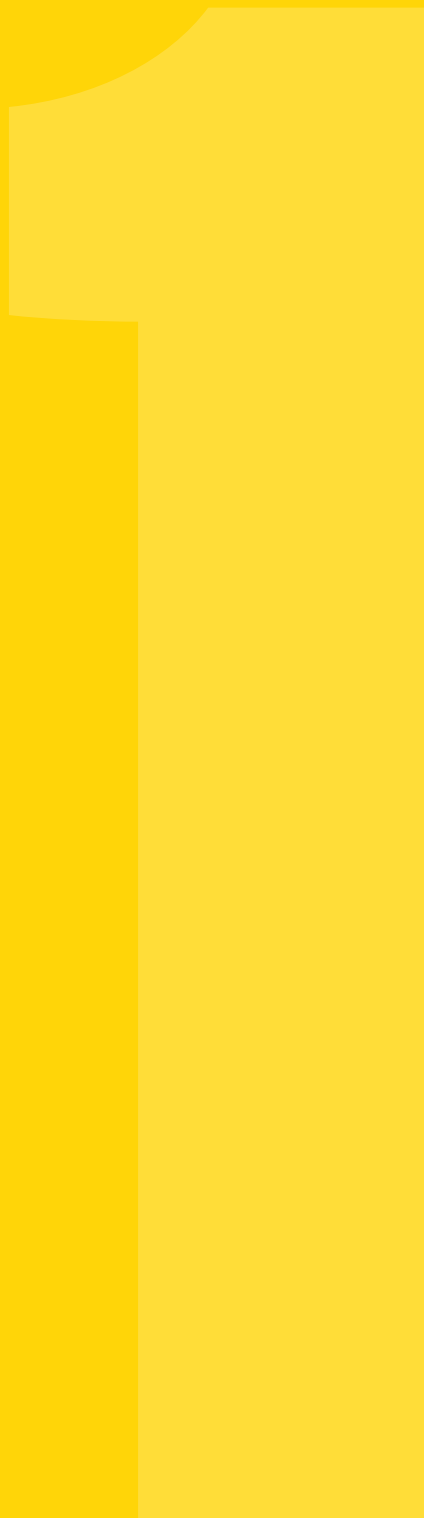






The background is a solid yellow color with several thin, white, concentric circles of varying radii centered on the left side of the page. The text is positioned in the center of the page, overlapping the circles.

# **THE CASE FOR IMMUNIZATION**



Immunization reaches more people than any other health or social service and is a vital component of primary health care. It benefits individuals, communities, countries and the world. It is an investment in the future, in three ways.

## 1.1 Saving lives and protecting the health of populations (4–6)

Immunization has reduced the number of deaths from infectious diseases dramatically. Vaccines also prevent disability, which can impair children's growth and cognitive development, so that they not only survive but also flourish.

Vaccines benefit not only infants and children but also older people. They can prevent infection-related cancers and protect the health of the elderly and the vulnerable, allowing people to live longer, healthier lives. In addition, fewer infections mean less risk of transmitting disease to relatives and other members of the community.

In many countries, out-of-pocket payments for health care have a catastrophic impact on household finances, potentially plunging households into poverty. Preventing infection by vaccination can reduce families' expenditure on health care, contributing to financial protection, which is a core component of universal health coverage.

## 1.2 Improving countries' productivity and resilience (7,8)

Immunization is the foundation of a healthy, productive population. Preventing infections reduces the burden on health systems, and a healthier population is a more productive one. Children protected against infectious diseases have better educational attainment and contribute more to national development and prosperity.

Halting disease outbreaks is disruptive and costly. Outbreaks can overwhelm and profoundly disrupt public health programmes, clinical services and health systems. They may also have adverse effects on travel, trade and overall development. For seasonal diseases like influenza, the costs of treatment and lost productivity are borne repeatedly. Immunized communities are resistant to infectious disease outbreaks, and strong health systems and immunization programmes allow rapid detection and response to limit their impact.

Between 2010 and 2017, the mortality rate of children under 5 years of age decreased by **24%**, due in large part to immunization (4).

In countries that have introduced the vaccine against human papillomavirus (HPV), after 5–8 years, cancer causing HPV prevalence was reduced by **83%** among girls aged 13–19, and the prevalence of precancerous lesions decreased by **51%** among girls aged 15–19 (5).

Vaccines will help keep an estimated **24 million** people from falling into poverty by 2030 (6).

Immunization against measles in 94 low- and middle-income countries returned an estimated **US\$ 76.5** for every US\$ 1 invested in vaccination (7).

The full economic impact of the 2014–2016 outbreak of Ebola virus disease in West Africa has been estimated at **US\$ 53.2 billion** (8).

## 1.3 Enabling a safer, healthier, more prosperous world (9–11)

Vaccines are a critical component of the battle against emerging and re-emerging infections. Pathogens are not bound by national borders, and local and international movement of people can rapidly spread infections. Increasing urbanization results in large, dense populations, raising the likelihood of infectious disease transmission and outbreaks. In addition, climate change exposes new populations to vector-borne diseases and may alter the patterns and intensity of seasonal diseases. Detecting, preventing and responding to infectious disease threats are therefore key to **global health security**.

In all parts of the world, infectious diseases are increasingly developing resistance to antibiotics and other antimicrobials. Preventing infection through immunization not only protects people against drug-resistant infections but also reduces their spread and the need for and use of antibiotics, thereby contributing to the battle against **antimicrobial resistance**.

Immunization and disease surveillance are core capacities required by the **International Health Regulations (2005)**, as they contribute to resilient, sustainable health systems that can respond to infectious disease outbreaks, public health risks and emergencies (11). Furthermore, the safe management and disposal of vaccine waste ought to be part of all vaccination activities, contributing directly to patient safety and quality of care, while reducing environmental and climate risks.

Immunization plays a critical role in **achieving the SDGs**, specifically SDG3, "Ensure healthy lives and promote well-being for all at all ages", and also contributes directly or indirectly to 13 other SDGs (Fig. 1).

Climate change between 2030 and 2050 is expected to cause **60 000** additional deaths from malaria per year (9). This trend may be changed by use of a malaria vaccine being pilot-tested in three African countries.

It is estimated that widespread use of the pneumococcal conjugate vaccine (PCV) could reduce the number of days on antibiotics for pneumonia in children under 5 years by 47%, equivalent to **11.4 million days** on antibiotics per year (10).

A 10% increase in the core capacities required by the International Health Regulations (2005) (e.g. surveillance, risk communication) is associated with a **19% decrease** in the incidence of cross-border infectious threats (11).

**Figure 1.** Contributions and relevance of immunization to 14 of the 17 SDGs

 <p>1 NO POVERTY</p>	<p>Immunization plays a key role in <b>eliminating poverty</b>, by reducing treatment costs and increasing longer-term productivity by averting losses due to disability and death.</p>	 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>Immunization promotes a <b>healthy and productive workforce</b>, which contributes to the economy.</p>
 <p>2 ZERO HUNGER</p>	<p>Immunization and <b>nutrition</b> go hand in hand. Malnourished individuals, especially children, are more likely to die from infectious diseases such as diarrhoea, measles and pneumonia.</p>	 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>Vaccine manufacture contributes to national industrial <b>infrastructure</b> in low- and middle-income countries.</p>
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<p>Vaccination is one of the most cost-effective ways of saving lives and promoting good <b>health and well-being</b>.</p>	 <p>10 REDUCED INEQUALITIES</p>	<p>Immunization prevents diseases that affect <b>the most marginalized groups</b>, especially those in poor urban or remote rural settings and in areas of conflict.</p>
 <p>4 QUALITY EDUCATION</p>	<p>Immunization increases <b>educational attainment</b>, as it improves long-term cognitive development. Children who are immunized tend to attain more years of schooling and score higher in cognitive tests than those who are unvaccinated.</p>	 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>Immunization protects urban public health and interrupts disease transmission, ensuring <b>sustainable cities and communities</b>.</p>
 <p>5 GENDER EQUALITY</p>	<p>Removal of gender-related barriers to vaccination contributes to <b>gender equality</b>, as it supports women's full participation and equal opportunities for accessing health services.</p>	 <p>13 CLIMATE ACTION</p>	<p>Immunization is critical to building people's resilience to and mitigating the risk of disease outbreaks linked to <b>climate change</b>, such as yellow fever, malaria, meningitis and cholera.</p>
 <p>6 CLEAN WATER AND SANITATION</p>	<p>When vaccination is complementary to <b>clean water, sanitation and hygiene</b>, it prevents diarrhoeal diseases, which are the leading cause of child mortality in low-income countries.</p>	 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p><b>Effective, safe, people-centred health systems</b> are the backbone of social institutions, and vaccination is often the regular point of contact of the population with the system.</p>
 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>Immunization logistics increasingly involve use of cleaner, more sustainable techniques based on solar and other <b>renewable sources of energy</b>.</p>	 <p>17 PARTNERSHIPS FOR THE GOALS</p>	<p>Immunization programmes broaden <b>partnerships</b> and multisectoral approaches, ensuring that civil society, communities and the private sector work together towards common goals.</p>

Source: reference 12



The background is a solid blue color with several concentric white circles of varying radii, creating a ripple effect. The text is centered in the middle of the image.

# **A STRATEGY FOR THE FUTURE**



2

**IA2030 envisions "A world where everyone, everywhere, at every age, fully benefits from vaccines for good health and well-being."**

To achieve this ambitious vision, lessons have been drawn from the past to identify factors that contribute to success.

## **2.1 Lessons from the Global Vaccine Action Plan**

The Global Vaccine Action Plan (GVAP) was the global immunization strategy of the "Decade of vaccines" (2011–2020). Developed through extensive global consultations, GVAP brought together existing goals to eradicate and eliminate diseases and set new global goals that accounted for the full spectrum of functions of immunization programmes. The review of experience with GVAP in 2019 (3) revealed important lessons for the decade to 2030.

GVAP brought together many global, regional and national stakeholders in a **shared vision and strategy** for the future of immunization. The health and immunization community agreed to aspirational goals to catalyse action, and, although many GVAP goals have not been met, much progress has been made.

GVAP enhanced the visibility of immunization and helped build high-level **political will**. It provided a common framework for establishing priorities, aligning activities and assessing progress, and it created a platform on which further work can be built. GVAP was a comprehensive strategy, and most of its goals and objectives remain relevant.

GVAP was to be implemented through **national immunization programmes, with the support of partners**; however, GVAP was only partially successful in influencing national actions, and partner activities were not always fully coordinated globally or nationally. To enhance country ownership, which is critical to the success of the IA2030, tailored strategies will be necessary to respond to the significant differences among countries in size, resources and the conditions in which people live, with consideration of subnational differences. IA2030 will strengthen existing partnerships and build new relations, especially at the country level, such as with a wider range of civil society organizations and the private sector, under the leadership of national programmes.

During GVAP implementation, **regional vaccine action plans** were used to translate global strategies into regional plans. Regional vaccine action plans will be revised to align with IA2030, as a critical step in operationalization.

GVAP struggled to influence national and global responses to situations that arose during the decade, such as conflict, climate change, migration and urbanization,

as well as the spread of misinformation about vaccines. In IA2030, more flexibility may be required to account for national and subnational circumstances to in order to respond effectively to **emerging challenges**.

GVAP established the first global **monitoring and evaluation framework** for immunization, defining roles and responsibilities for stakeholders. The framework provided a wealth of information on progress and raised awareness of the importance of high-quality data. It was unable to ensure, however, that use of the data improved the performance or accountability of national programmes, especially at subnational level.

IA2030 will build on these lessons to further clarify roles and responsibilities, so that the agenda can be implemented nationally, regionally and globally, and improving the use of data to prompt action and ensure accountability.

## 2.2 Lessons from disease-specific initiatives

GVAP drew together existing goals to eradicate polio and to eliminate measles, rubella and maternal and neonatal tetanus. These disease-specific initiatives were inspired by the landmark achievement of smallpox eradication. They have the advantage of focusing on a single, clear objective and agreement on common approaches and timelines. After the World Health Assembly had endorsed GVAP, it approved additional disease-specific targets (Table 1).

**Table 1.** Goals and targets of disease-specific initiatives

Disease-specific goal or initiative	Targets
<b>Polio eradication (GVAP, Polio Endgame Strategy 2019–2023)<sup>a</sup></b>	Interrupt transmission of all wild poliovirus by 2020. Stop circulating vaccine-derived poliovirus outbreaks within 120 days of detection. Certify eradication by 2023.
<b>Neonatal tetanus elimination (GVAP)</b>	Eliminate neonatal tetanus in the remaining 40 countries by 2015.
<b>Measles and rubella elimination (GVAP, Global Measles and Rubella Strategic Plan 2012–2020)</b>	Eliminate measles in at least five WHO regions by 2020. Eliminate rubella in at least five WHO regions by 2020.
<b>Cholera control (Ending Cholera – A Global Roadmap to 2030)</b>	Reduce cholera deaths by 90% by 2030.

Disease-specific goal or initiative	Targets
<b>Elimination of viral hepatitis as a major public health threat (Global Health Sector Strategy on Viral Hepatitis 2016–2021)</b>	<p>Reduce new cases of chronic viral hepatitis B infections by 95% by 2030 (equivalent to 0.1% prevalence for HBsAg among children).</p> <p>Reduce viral hepatitis B deaths by 65% by 2030.</p>
<b>Control of vector-borne diseases (including Japanese encephalitis) (Global Vector Control Response 2017–2030)</b>	<p>Reduce mortality due to vector-borne diseases by at least 75% by 2030.</p> <p>Reduce case incidence due to vector-borne diseases by at least 60% by 2030.</p> <p>Prevent epidemics of vector-borne diseases in all countries by 2030.</p>
<b>Elimination of yellow fever epidemics (Eliminate Yellow Fever Epidemics)</b>	<p>Reduce yellow fever outbreaks to zero by 2026.</p>
<b>Elimination of meningitis epidemics and reduction of cases and deaths (Global Roadmap to Defeat Meningitis)</b>	<p>Eliminate meningitis epidemics by 2030.<sup>b</sup></p> <p>Reduce the numbers of cases and deaths from vaccine-preventable bacterial meningitis by 2030.<sup>c</sup></p> <p>Reduce disability and improve quality of life after meningitis due to any cause by 2030.</p>
<b>Reduction of seasonal influenza burden (Global Influenza Strategy 2019–2030)</b>	<p>No disease-specific targets.</p>
<b>Zero deaths from dog-mediated rabies by 2030 (Zero by 30: The Global Strategic Plan)</b>	<p>Reduce the number of deaths from dog-mediated rabies to zero by 2030.</p>

a Target dates depend on the epidemiological situation.

b As of 13 September 2019.

c Targets will be set at regional level.

Although disease-specific goals are enduring global commitments that will continue to be an important element of IA2030, revisions may be made during development of the IA2030 monitoring and evaluation framework, especially to goals for which the target dates have passed.

**Polio.** Enormous progress has been made towards eradication of polio. Wild poliovirus is now circulating in only two countries, where conflict, lack of access, cross-border population movement, insufficient polio vaccine coverage in immunization programmes, difficulty in sustaining community engagement and

weak health infrastructure are major obstacles to reaching the polio eradication goal. The continuing challenges in interrupting the transmission of wild poliovirus and circulating vaccine-derived poliovirus outbreaks in countries that had been declared polio-free demonstrate the importance of strong immunization programmes as part of primary health care in reaching and sustaining global eradication. In addition, as the world moves closer to global polio eradication, the decrease in resources provided through the Global Polio Eradication Initiative (GPEI) is an additional challenge. In many countries, GPEI helped build an infrastructure, supporting immunization functions beyond polio. Effective planning without such infrastructure and resources is therefore vital to ensure that functions essential for shared disease-prevention goals – vaccine-preventable disease surveillance, strong immunization services and outbreak responses – are sustainably integrated into national immunization programmes.

**Measles.** Before measles vaccines were introduced in the 1960s, measles was a leading cause of child morbidity and mortality worldwide, responsible for more than 2 million deaths annually. Between 2000 and 2018, stronger health systems and increased measles vaccination coverage resulted in a 73% global decrease in mortality. Regional elimination has not, however, been achieved or sustained, and an alarming resurgence in measles cases and deaths has been seen around the world in recent years, in some cases with cross-border importations and even small pockets of immunity gaps leading to large outbreaks. As measles is so contagious, very high vaccine coverage (95%) with two timely doses of measles-containing vaccine is required to prevent its spread. Coverage with the first dose of measles vaccine has plateaued globally at around 85% over the past decade, and, although coverage with the second dose has increased to 69%, the percentage is not sufficiently high, and supplementary means of delivering vaccine are necessary through planned campaigns, periodic intensification of routine immunization and other strategies. Providing every child with two timely doses of measles-containing vaccine and effective elimination-standard measles surveillance are, therefore, critical indicators of a strong immunization programme, as an integral component of primary health care. Measles cases indicate gaps in population immunity, signalling inadequate access or uptake. A strong, resilient immunization programme is essential to respond to this challenge and a powerful, measurable means of achieving health equity.

**Maternal and neonatal tetanus.** Three fourths of priority countries have eliminated maternal and neonatal tetanus; more work is necessary to eliminate the disease in the remaining 25%. Elimination of maternal and neonatal tetanus will reduce neonatal mortality, which has decreased more slowly than for children under 5 years of age. Although current strategies address inequity, they target only pregnant women and women of reproductive age, leaving older boys and adult and elderly men unprotected from tetanus. Strategies that include booster doses for vaccination of whole populations in a life-course approach will help overcome gender disparities. As maternal and neonatal tetanus is also strongly

associated with poverty, its incidence can be used as a marker of the quality of the health services delivered to marginalized and underserved populations and of their uptake by these populations.

**Strengthened systems for integrated disease control.** Control of key infectious diseases equitably, efficiently and sustainably requires both robust immunization programmes and targeted, disease-specific strategies. Strong disease surveillance and immunization programmes are integral components of primary health care and are essential for raising immunity, reducing the risk of disease and preventing morbidity and mortality. Supplementary immunization activities may still be necessary, however, to boost immunity quickly in targeted populations. The mixture and balance of these two approaches depends on disease epidemiology, the context and the ability of health systems to deliver vaccines to those who need them most.

Lessons learnt from the past decade demonstrate that it is difficult to eradicate or eliminate a disease in the absence of an efficient, resilient immunization programme. IA2030, therefore, emphasizes building a strong national immunization infrastructure integrated into primary health care services, as a way to achieve and sustain elimination and eradication goals. To achieve universal health coverage through primary health care, all aspects of health systems will need to be strengthened, including immunization and other preventive services, disease surveillance, regular collection and use of reliable data, emergency outbreak preparedness and response, a strong workforce, good governance and social accountability, appropriate budget allocations, financial management and efficient patient care for existing and emerging diseases.

## 2.3 The changing context and challenges

IA2030 has been shaped by both lessons from the past decade and the changing global environment.

**Sustaining trust.** Uptake of vaccination depends on many factors, from the convenience and quality of facilities and services to the spread of misinformation about the safety and effectiveness of vaccines. These considerations must be understood and addressed to enhance and sustain trust in vaccines and immunization services in communities, to increase health literacy with a focus on vaccination at all levels, and to build resilience against misinformation. The harm being caused by anti-vaccine messaging, especially on social media, should be addressed by understanding the context and reasons for lack of trust and by building and keeping trust, especially in the face of fear and distrust in traditional establishments. Strategic investments to increase trust and confidence in vaccines, in particular through strong community engagement, would increase community support for vaccines and ensure that vaccination is viewed as a social norm.

**Inequity.** The benefits of immunization are not spread equally, either among or within countries. In 2018, 70% of unvaccinated children lived in **middle-income countries** (13). Reaching all people will require higher national vaccination coverage, but also less **subnational inequity**. Success will require interventions that take into account poverty, education, socioeconomic and cultural factors and gender-related barriers to access.

**Population movements.** Continuing **urbanization** will pose major challenges, as it results in large, dense populations at high risk of infectious disease. Migration and **cross-border population movements** can result in large communities of unprotected individuals at risk of infection. Migrants and mobile populations are often difficult to reach or track. As they often move across borders, it is not even clear who is responsible for vaccinating them, and they may be marginalized and overlooked.

**Ensuring immunization for all ages.** Expanding the benefits of vaccination to all age groups offers tremendous opportunities, but it will require major shifts in immunization programmes. As more vaccines become available for older age groups, new methods will be necessary to deliver integrated, people-centred health services. Programmes will also have to respond to significant global **demographic shifts**. Regions such as Africa are undergoing rapid population growth and a resulting "youth bulge", while others are experiencing significant population ageing. These shifts will have a major impact on the design of immunization services.

**Climate change and natural disasters.** The world's changing climate will have significant implications for the prevalence of infectious diseases. New populations will be exposed to vector-borne diseases such as malaria and dengue, and more flooding will increase the spread of waterborne diseases such as cholera. Climate change is also disrupting seasonal disease patterns, shifting the timing, duration and pattern of their transmission. It may also alter the endemicity of infectious diseases. Climate-informed surveillance and response systems will be an essential part of national preparedness for infectious disease outbreaks. The environmental impact of vaccine waste, from excess packaging to the release of harmful pollutants during burning, will have to be addressed more comprehensively and minimized.

**Conflict and political instability.** Civil conflict can rapidly lead to loss of health service infrastructure and shortages of trained health workers, often for extended periods, thereby disrupting delivery of immunization services. The affected populations are also frequently at higher risk of infectious diseases because of the breakdown of national infrastructure and mass displacement into temporary settlements.

**Outbreaks.** The world continues to experience outbreaks of measles, yellow fever, diphtheria and other vaccine-preventable diseases and also emerging infections, such as Ebola virus disease. Disease surveillance and immunization are critical for preventing, detecting and controlling infectious disease outbreaks. **Disease surveillance** provides insight into the effectiveness of immunization programmes, indicates how they can be optimized and provides early warning of potential outbreaks. Comprehensive preparedness and response strategies, including research during outbreaks, will limit their impact on health and national finances.

**Optimizing and maintaining supplies.** Achieving the IA2030 vision will require a **reliable global supply of appropriate, affordable, innovative vaccines and other immunization products of assured quality**. Every year, many countries experience disruptions in their supplies of vaccines, often because of a mismatch between global production levels and needs. Healthy market dynamics must be achieved and maintained for vaccines and immunization products in the long term, both globally and regionally. Reliable forecasts of national vaccine requirements and priorities will continue to ensure healthy market dynamics and improve and maintain supplies. The **price of vaccines** is a key barrier to access and can delay the introduction of new vaccines into low- and middle-income countries. There are also regulatory, financing and procurement barriers to sustainable vaccine supplies. For instance, the markedly different procurement processes in countries might have to be adjusted to respond to changes in the vaccine market and in quality-assurance requirements.

## 2.4 What is new on the IA2030 agenda?

These lessons from the past and the changing context make IA2030 different from its predecessor, GVAP, in several respects.

- **Cooperative design from the bottom up.** IA2030 was developed collaboratively with countries, to ensure that the vision, strategic priorities and goals<sup>2</sup> are aligned with country needs.
- **Tailored to the national context.** The IA2030 strategic framework is flexible, allowing countries to adapt the global framework to their local context and partners to provide differentiated, targeted, customized support.
- **Adaptable to changing needs.** The IA2030 strategic framework can be adapted to changing needs and new challenges that may emerge during the decade.

---

2. In the context of this document, a "goal" is an ambitious commitment to address a single challenge; an "indicator" is a measure of a goal; and a "target" is a specific (sometimes time-bound) outcome of achievement of an indicator.



- **Targeted ways to reduce inequity.** IA2030 ensures that the benefits of immunization are shared equitably among and within countries. It gives priority to the populations that are not currently being reached, particularly the most marginalized communities, those living in fragile and conflict-affected settings and mobile populations, especially those moving across borders.
- **Gender-responsive strategies.** IA2030 focuses not only on equitable coverage of boys and girls, but aims at understanding and addressing all the direct and indirect barriers to access to immunization services, including those related to the gender of caregivers and health workers, and increasing women's full and equal participation in decision-making at all levels.
- **Stronger focus on systems strengthening.** IA2030 positions sustainable immunization programmes embedded within primary health care as the basis for achieving high vaccination coverage and universal health coverage. Notably, IA2030 builds on the goals of existing disease-specific initiatives, while at the same time stressing health system strengthening to help achieve the goals of disease control, elimination and eradication.
- **Measles as a tracer.** Measles coverage is an important indicator for attaining SDG3 indicator 3b 1.<sup>3</sup> In IA2030, measles vaccination coverage and incidence recorded by surveillance are tracers of the strength of immunization programmes, indicating communities and age groups that are un- or under-immunized and where more emphasis is required.
- **Life-course approach.** The growing number of new vaccines administered after childhood is opening frontiers for national immunization programmes and will require new methods for delivery. Furthermore, booster doses should be introduced for lifelong protection against diphtheria, pertussis and tetanus. IA2030 has a stronger focus on extending the benefits of vaccination throughout the life-course.
- **Strengthening partnerships beyond health.** The future of immunization will increasingly be based on integration and collaboration with stakeholders within and beyond health. IA2030 proposes closer collaboration with existing and new partners. Such enhanced collaboration will have mutual advantages, extending the benefits of immunization while helping others to achieve their goals.

---

3. Proportion of the target population with access to measles-containing-vaccine second-dose (MCV2) (%).

- **Accelerating innovation.** A more nimble, robust research agenda offers new opportunities to meet future challenges. IA2030 focuses on not only the development of new vaccines but also accelerating innovation to improve programme performance, surveillance and quality and to increase access to data, drawing on lessons from other sectors.
- **Better use of resources for self-sustainability.** IA2030 emphasizes maximization of the impact to be achieved with existing resources. Efficient, effective, resilient national immunization programmes delivered within primary health care, backed by strong political commitment and popular support, hold the key to progress and long-term sustainability. Partners play a vital role in supporting countries on the path to self-sustainability.

These shifts in emphasis do not lessen the importance of GVAP priorities that are still relevant, which are incorporated into the IA2030 framework for action.





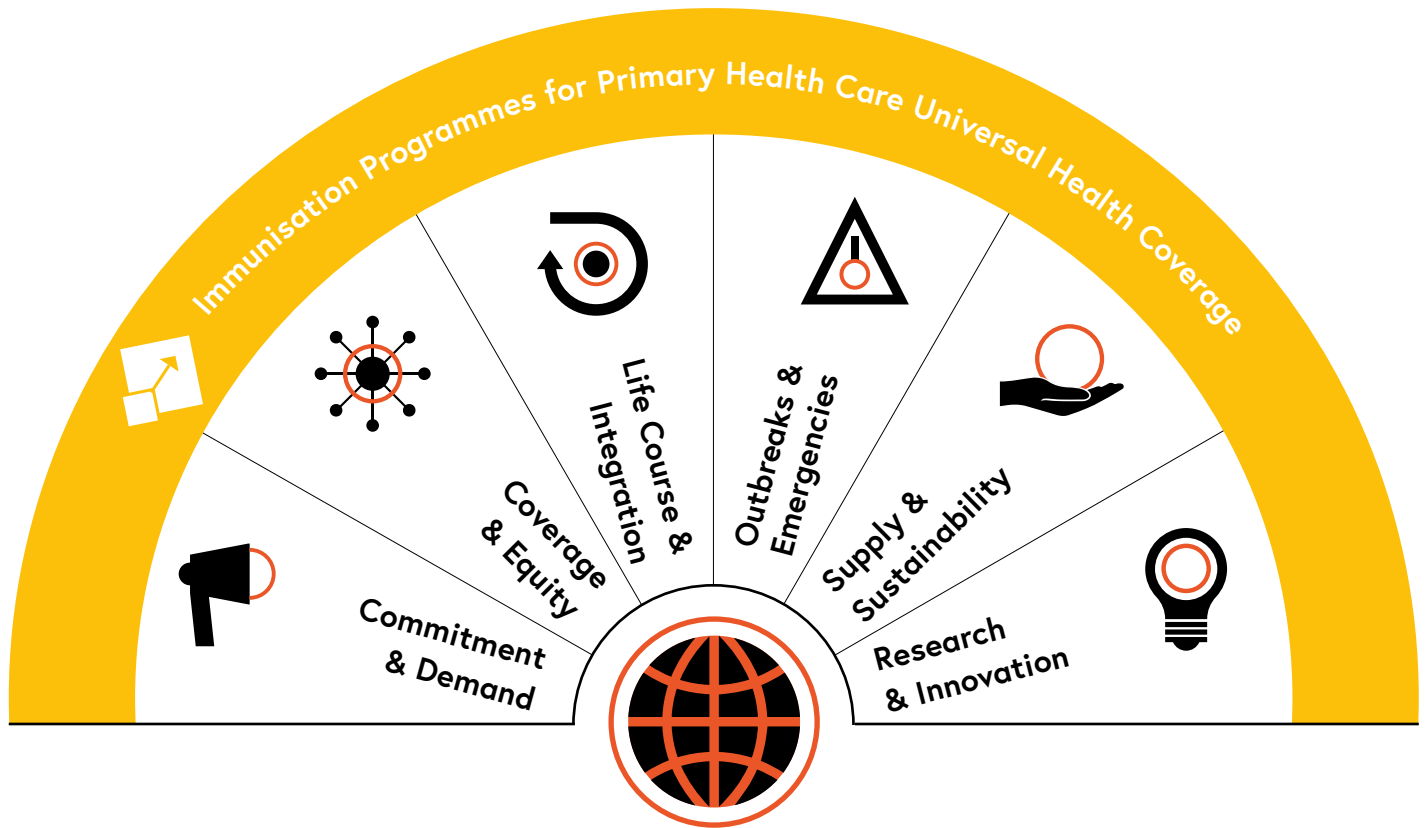
The background is a solid green color with several thin, white, concentric circles of varying radii centered on the left side of the page. The text is positioned in the center of the page, overlapping the circles.

# **A FRAMEWORK FOR ACTION**

33

IA2030 is based on a conceptual framework of **seven strategic priorities** (Fig. 2). Each strategic priority has defined **goals and objectives** and **key areas of focus**. Action is necessary to achieve these interrelated strategic priorities to realize the overall vision and goals and to ensure that immunization fully contributes to stronger primary health care and attainment of universal health coverage.

**Figure 2.** The seven strategic priorities of IA2030



People  
Centred



Country  
Owned



Partnership  
Based



Data  
Guided

The **first, overarching strategic priority** is to ensure that immunization programmes are an integral part of primary health care to achieve universal health coverage. The second is commitment and community demand. These two strategic priorities are the **basis of an immunization programme** and are essential to deliver people-centred, demand-driven health services to individuals and communities.

The next three strategic priorities, coverage and equity, life-course and integration and outbreaks and emergencies, ensure the **delivery of immunization services**, in the face of population growth, continuing urbanization, rising migration, cross-border movement and displacement of populations, conflict, political instability, natural disasters and climate change.

The remaining two strategic priorities are **enablers of success**. Continued investment is necessary to combat infections for which there is no vaccine. Similarly, innovation will improve the performance of immunization programmes by ensuring the delivery of services to underserved populations. Ensuring a reliable global supply of affordable vaccines and the sustainability of national programmes worldwide are also essential for success.

These seven strategic priorities are anchored by **four core principles** that will shape the nature of actions undertaken to achieve each strategic goal and objective (Fig. 3). These principles are the threads that weave together the strategic priorities and provide guidance on translating the high-level strategy into practical actions. They convey the values and guiding principles for mutually beneficial partnerships and alignment of the activities of all partners within and outside of the immunization community.

**Figure 3.** The four core principles of IA2030



#### People-centred

Responding to populations needs.

The design, management and delivery of immunization services should be shaped by and responsive to the needs of individuals and communities, including addressing barriers to access to immunization services due to age, location, social and cultural norms and gender-related factors.



#### Partnership-based

Aligning efforts to maximize impact.

Immunization partners should align and coordinate their actions to increase efficiency, build on complementarity and involve sectors beyond immunization for mutual benefit.



#### Country-owned

Driving progress from the bottom up.

Countries should establish targets that represent the local context and should be held accountable for achieving them.



#### Data-guided

Promoting evidence-based decision-making.

High-quality, "fit-for-purpose" data will be used to track progress, improve programme performance and form the basis of decision-making at all levels.

# STRATEGIC PRIORITY 1.

## Immunization programmes for primary health care and universal health coverage

**Goal** Effective, efficient and resilient immunization services are accessible to all people as an essential part of primary health care, and thereby contribute to universal health coverage.

- Objectives**
- Reinforce and sustain strong leadership, management and coordination of immunization programmes at all levels.
  - Ensure the availability of an adequate, effective, sustainable health workforce.
  - Build and strengthen comprehensive vaccine-preventable disease surveillance as a component of the national public health surveillance system, supported by strong, reliable laboratory networks.
  - Secure high-quality supply chains for vaccines and related commodities and effective vaccine management, within the primary health care supply system.
  - Strengthen immunization information within a robust health information system, and promote use of high-quality, "fit-for-purpose" data for action at all levels.
  - Establish and maintain a well-functioning vaccine safety system involving all stakeholders.

**Key areas of focus**

**Immunization in primary health care:** Ensure that sustainable immunization programmes are an integral part of the national primary health care strategies and operations, and of national strategies for universal health coverage.

**Leadership, governance and management:** Create an environment for effective coordination, financial management and performance monitoring at every level of the immunization programme.

**Health workforce:** Ensure the availability and appropriate distribution of health workers who are motivated, skilled, knowledgeable and appropriately resourced to plan, manage, implement and monitor the performance of immunization programmes at all levels and locations, as part of primary health care.

**Supply chain and logistics:** Strengthen supply chains to ensure that high-quality vaccines are always available in the right quantity and form at the right time, in the right place and stored and distributed under the right conditions. Promote integration with other supply chains for more effective delivery of primary health care. Invest in systems and infrastructure to safely manage, treat and dispose of vaccine waste to help reduce their environmental footprint.



## Immunization programmes for primary health care and universal health coverage

### Key areas of focus

**Vaccine-preventable disease surveillance:** Increase the efficiency, responsiveness and comprehensiveness of disease surveillance (including epidemiology and laboratory capacity) in order to: encourage the introduction of vaccines; optimize immunization programmes; measure the impact of vaccines; monitor disease control, elimination and eradication; and detect, investigate and respond to outbreaks. These activities should be based on existing surveillance infrastructure, such as that for polio and measles.

**Health information systems:** Ensure that health information systems allow health workers and decision-makers to generate and use high-quality, "fit-for-purpose" data to implement and manage immunization programmes effectively at all levels and that the data are also integrated into national health information systems.

**Monitoring vaccine safety:** Ensure that national immunization programmes can detect and respond to any concern about vaccine safety by continuous monitoring and coordination among relevant stakeholders.

**Disease control initiatives:** Ensure that strengthening of national health systems and initiatives for disease control, elimination and eradication are coordinated for mutual reinforcement.

### Application of the core principles

**People-centred.** Immunization programmes will be designed and tailored to the needs and social and cultural preferences of people and communities.

**Country-owned.** National strategies and plans to build and sustain robust immunization programmes will strengthen health systems and primary health care in order to attain universal health coverage.

**Partnership-based.** Public and private partnerships will be formed, including with partners beyond the health sector, with the private sector and with civil society organizations, for coordinated strengthening of immunization programmes.

**Data-guided.** Data, evidence and best practice will guide strengthening of immunization programmes and improve their design and performance for universal health coverage.

# STRATEGIC PRIORITY 2.

## Commitment & demand<sup>4</sup>

**Goal** Immunization is valued and actively sought by all people, and health authorities commit to ensuring that immunization is available as a key contributor to enjoyment of the highest attainable standard of health as a fundamental right.

- Objectives**
- Build and sustain strong political and financial commitment for immunization at all levels.
  - Ensure that all people and communities value, actively support and seek out immunization services.

**Key areas of focus**

**Commitment:** Ensure that key groups, champions and stakeholders advocate for greater commitment to and ownership of immunization programmes and for sustained national and subnational financing. Encourage leaders to prioritize immunization in strategic and operational planning and in policy, fiscal and legislative instruments. Strengthen evidence-based decision-making, with technical input from bodies such as a national immunization technical advisory groups (NITAGs).

**Subnational support:** Build support for immunization and capacity for national and subnational leadership, management and coordination, especially in large countries and in those with decentralized health systems. Establish mechanisms for stakeholder coordination and participation in planning, implementation and monitoring.

**Accountability:** Establish accountability frameworks for all stakeholders, with platforms for engagement and dialogue. Ensure that communities and civil society organizations are equipped to hold national and subnational authorities accountable for equitable delivery and for the quality of immunization services. Ensure access to data and information, and develop frameworks for joint monitoring.

**Public trust and confidence:** Establish an ongoing understanding of all the behavioural and social drivers to vaccination (including social processes, gender-related barriers, practical factors and social media) to engage communities and encourage greater use of immunization services.

4. In the context of this strategic priority, "demand" refers to the actions of individuals and communities to seek, support or advocate for vaccines and vaccination services. Demand is dynamic and varies by context, vaccine, vaccination services, time and place. It can be fostered by governments, immunization programme managers, public and private sector providers, local leaders and civil society organizations that listen and act on the comments of individuals and communities .

## Commitment & demand<sup>4</sup>

### Key areas of focus

**Public knowledge and understanding:** Include the topic of immunization in education curricula, formulate public education tools (including to meet the needs of vulnerable and marginalized groups), provide educational opportunities for the health workforce, and prepare information resources for advocacy groups.

**Acceptance and value of vaccination:** Use local data to understand and devise tailored solutions to address the underlying causes of low vaccination rates. Use the evidence to respond to practical barriers, such as access to good-quality services, and to support positive attitudes and social influences. Proactively implement plans to prevent and respond to adverse events, rumours and hesitancy and strengthen resilience to these influences.

**Addressing reluctance to vaccinate:** Understand and respond to public concern, and develop robust, innovative strategies to mitigate vaccine misinformation and reduce its propagation and negative impact.

### Application of the core principles

**People-centred.** Community engagement will be at the heart of building people's trust and of their acceptance and use of vaccines. The emphasis is on dialogue, service quality, effective and respectful provider communication in primary care and accountability.

**Country-owned.** Political leaders, civil society and immunization champions will ensure that countries are committed to ensure the enjoyment of the highest attainable standard of health and to protection of communities against vaccine-preventable diseases.

**Partnership-based.** New partnerships will be built among multiple actors to increase knowledge and raise awareness of the value of immunization, to build community trust and to overcome barriers to equity, including gender-related barriers.

**Data-guided.** Evidence on behavioural and social factors will be obtained locally and nationally to develop appropriate interventions. Communication technology will be used to increase commitment to and demand for immunization.

# STRATEGIC PRIORITY 3.

## Coverage & equity

**Goal** Everyone is protected by full immunization, regardless of location, age, socioeconomic status or gender-related barriers.

- Objectives**
- Extend immunization services to regularly reach "zero dose" and under-immunized children and communities.
  - Advance and sustain high and equitable immunization coverage nationally and in all districts.

**Key areas of focus**

**Disadvantaged populations:** Identify and address low coverage throughout the life-course of the poorest and most disadvantaged individuals and communities.

**Barriers to vaccination:** Identify barriers to uptake of vaccination services due to age, location, social and cultural and gender-related factors, and use evidence-based approaches to overcome these barriers to achieving high, equitable coverage.

**Gender-responsive strategies:** Understand the role of gender in accessing vaccination services, and use gender-responsive strategies to overcome the barriers faced by recipients, caregivers, service providers and health workers.

**Measles as a tracer:** Use measles cases and outbreaks as a tracer to identify weaknesses in immunization programmes, and to guide programmatic planning in identifying and addressing these weaknesses.

**Learning from disease-specific initiatives:** Use the experience of disease eradication and elimination initiatives in reaching the most marginalized populations, and integrate successful strategies for delivery and accountability into immunization programmes, with the full integration of disease control perspectives into primary health care.

**Context-specific interventions:** Develop, evaluate and scale up innovative, locally tailored, evidence-based, people-centred approaches to reach poorly served populations.

**Implementation research:** Strengthen local capacity to conduct implementation research to identify factors that affect the equity of immunization coverage, interventions that enhance coverage and equity and promote use of the results to implement locally tailored, context-specific interventions and innovations to address inequities.

## Coverage & equity

### Application of the core principles

**People-centred.** Gaps in coverage and equity will be addressed, especially among marginalized and disadvantaged groups such as mobile and displaced populations, by actively engaging representatives of local communities and local health providers in designing interventions for these groups.

---

**Country-owned.** To overcome barriers, national immunization programmes will use strategies based on proven, innovative approaches and local research on effective ways to deliver services to underserved groups.

---

**Partnership-based.** Partnerships will be built with local communities and representatives of marginalized groups to understand the obstacles to access to vaccination (including gender barriers faced by recipients, caregivers and health workers) and to address inequities.

---

**Data-guided.** Immunization data systems will be expanded subnationally to map and track "zero dose" and under-immunized populations and specific marginalized groups to ensure that they are covered by the immunization programme.

---

# STRATEGIC PRIORITY 4.

## Life-course & integration

**Goal** All people benefit from recommended immunizations throughout the life-course, effectively integrated with other essential health services.

- Objectives**
- Strengthen immunization policies and service delivery throughout the life-course, including for appropriate catch-up vaccinations and booster doses.
  - Establish integrated delivery points of contact between immunization and other public health interventions for different target age groups.

**Key areas of focus**

**Mobilizing support:** Raise awareness of the benefits of vaccination beyond early childhood, through adolescence and in priority adult groups such as pregnant women, health workers and older adults.

**Evidence-based delivery practices:** Identify and evaluate new delivery strategies for increasing coverage of recommended vaccines throughout the life-course.

**Missed opportunities:** Implement proven approaches to reduce the number of missed opportunities by integrating immunization into other primary health care planning, health registers and other record-keeping systems, and streamline use of all encounters with the health system to verify and provide missed vaccines and other essential health interventions.

**Cross-sector collaboration:** Form collaborations to integrate age-appropriate and catch-up vaccination into public and private health services, emphasizing the reciprocal benefits of receiving vaccines with other health interventions. Establish collaboration beyond the health care sector to ensure integration of immunization into context-specific programmes such as for education, nutrition, water and sanitation, care of older people and women's empowerment.

**Policy environment:** Promote changes in legislation or in the policy of immunization and other programmes to extend the national focus beyond early childhood immunization. Form new collaborations and private-sector partnerships to mobilize financing for vaccination of older age groups.

**Tracking vaccination status:** Institute policies for monitoring vaccination coverage at different ages and facilitating administration of vaccines throughout the life-course.

**Vaccine development:** Generate evidence on the disease burden among older age groups, the potential of vaccines to decrease it and the programmatic implications for introducing the vaccines.

## Life-course & integration

### Application of the core principles

**People-centred.** Vaccination throughout the life-course is integrated into other health care services for different age groups, according to the needs of individuals.

---

**Country-owned.** National immunization technical advisory groups will guide country programmes in extending vaccination beyond infancy throughout the life-course to reflect specific national and subnational contexts.

---

**Partnership-based.** Partnerships with other health programmes and with non-health actors (including in education, water, sanitation and hygiene and nutrition) are built into comprehensive life-course approaches for disease control and elimination, including for pneumococcus pneumonia, diarrhoea and cervical cancer.

---

**Data-guided.** Implementation and social and behavioural research will be conducted to generate evidence for effective delivery of integrated, coordinated packages of vaccination services and to identify new contact points for vaccination throughout the life course. Research will identify the vaccines required for older age groups.

---

# STRATEGIC PRIORITY 5.

## Outbreaks & emergencies

**Goal** Immunization programmes can (1) anticipate, prepare for, detect and rapidly respond to of vaccine-preventable and emerging disease outbreaks, and (2) ensure immunization service delivery during acute emergencies and among communities affected by conflict, disaster and humanitarian crisis.

- Objectives**
- Ensure preparation for, detection of and rapid, high-quality response to vaccine-preventable disease outbreaks.
  - Establish timely and appropriate immunization services during emergencies, and in communities affected by conflict, disaster and humanitarian crisis.

**Key areas of focus**

**Coordination and integration:** Strengthen coordination of implementation of vaccination and outbreak preparedness, detection and activities in the overall humanitarian response and in conformity with the International Health Regulations (2005) and health systems development programming, with the participation of all relevant stakeholders, including civil society, national and international organizations, humanitarian and development partners and the private sector.

**Local capacity:** Invest in and sustain local capacity and health systems to ensure timely detection of and response to vaccine-preventable disease outbreaks; identify and address the underlying causes of outbreaks; ensure that communities affected by outbreaks, other emergencies and humanitarian crises have continual access to a package of health services that includes immunization; and ensure that immunization recovery is embedded into outbreak and emergency response plans.

**Comprehensive health response:** Ensure that global, regional, national and subnational coordination and governance mechanisms effectively support equitable, transparent, timely decision-making on the allocation of essential supplies and vaccines and mobilization of trained human resources.

**Integrated surveillance:** Rebuild national, regional and local capacity for rapid, integrated surveillance of priority and emerging infectious diseases after an emergency or humanitarian event, maximizing opportunities to monitor and characterize multiple pathogens to ensure early detection of outbreaks. Strengthen integrated disease surveillance for epidemic-prone vaccine-preventable diseases to enhance prevention and response.



## Outbreaks & emergencies

### Key areas of focus

**Tailored approaches and innovation:** Develop, implement and evaluate innovative, tailored approaches and relevant frameworks and tools for safe, ethical, equitable vaccination of populations during outbreaks and in settings of humanitarian aid. Re-establish vaccination services after acute emergencies as part of broader early recovery and in line with disaster risk-reduction principles.

**Community engagement:** Prioritize two-way communication and engagement with communities and health workers during outbreaks and in settings of humanitarian aid to effectively limit health emergencies and outbreaks and promote participation in decision-making; ensure access to and use of services, and identify and fill unmet health needs.

### Application of the core principles

**People-centred.** Anticipation of, preparedness for and response to outbreaks and emergencies will include adaptation of interventions to meet all the needs of affected individuals, including mobile and displaced populations, and tailored interventions based on local knowledge. Mechanisms to ensure accountability to affected people should be in place for continual improvement of emergency vaccination interventions and transition to longer-term services.

**Country-owned.** National authorities will coordinate efforts to handle emergencies and outbreaks with local authorities, and services will be delivered by trained local staff and community mobilization networks. In crises in which national authorities do not coordinate provision of services, access to impartial, independently provided health care will be ensured.

**Partnership-based.** Partnerships will be built to prioritize and support capacity-building, planning and leadership of local and national organizations for coordinated provision of health care, including vaccination, in such a way as to support existing health systems and surveillance strategies during outbreaks and other acute emergencies and also in settings of humanitarian aid.

**Data-guided.** Routine, systematic collection of disaggregated data will be promoted to target vaccination to the most vulnerable populations and those at risk of exclusion. Research and evaluation will be conducted to generate evidence on novel approaches to identifying outbreaks early and to deliver vaccination and health services during outbreaks, other acute emergencies and in settings of humanitarian aid.

# STRATEGIC PRIORITY 6.

## Supply & sustainability

**Goal** All countries have a reliable supply of appropriate and affordable vaccines of assured quality, and sustainable financing for immunization programmes.

- Objectives**
- Build and maintain healthy global markets across all vaccine antigens.
  - Ensure sufficient financial resources for immunization programmes in all countries.
  - Increase immunization expenditure from domestic resources in aid-dependent countries, and when transitioning away from aid, secure government funding to achieve and sustain high coverage for all vaccines.

**Key areas of focus**

**Innovation and affordability:** Ensure that the supply of and access to new vaccines meet country needs and that vaccines are introduced in a timely manner, regardless of a country's wealth, and at a price that is affordable, to ensure the supply.

**Vaccine forecasting, procurement and supply:** Improve national and global forecasting, planning and procurement capability to safeguard affordable, sustainable supplies, and strengthen relations with manufacturers to ensure that vaccine production and supply meet national needs in all countries.

**Sources of assured quality vaccines:** Strengthen regulatory capacity in all countries to improve timely access to vaccines of assured quality and to allow diversification of manufacturing sources.

**Supply for emergency situations:** Strengthen mechanisms for rapid access in emergencies, outbreaks or pandemics and for people who require humanitarian aid. The mechanisms include sustainable manufacture and new means for rapid scaling-up of production to meet surge requirements and rapid access.

**Sufficient, predictable resources:** Ensure that funding from all sources is sufficient to procure and deliver recommended vaccines universally.

**Immunization financing:** Ensure good governance, stewardship and accountability of financing for immunization programmes for optimal performance and best value for money.

## Supply & sustainability

### Key areas of focus

**Partner alignment:** Streamline and align partnerships for immunization, primary health care or integrated financing, and ensure effective global collaboration in which the roles, responsibilities and accountability of all partners are clearly defined, transparent and monitored.

**Sustainable transitions:** Ensure mechanisms for smooth transition of countries from donor-supported programmes, while maintaining and enhancing their immunization programmes.

### Application of the core principles

**People-centred.** A strong focus on developing local capacity to govern and manage immunization financing and to increase understanding of choices for better forecasting of current and future vaccine markets.

**Country-owned.** Adequate country capacity to plan for and secure the financing required for their immunization programme will reduce reliance on external support. Countries will be able to plan, forecast, budget for and procure the required vaccines and ensure their quality.

**Partnership-based.** Better partnerships will be built to plan for and ensure long-term, sustainable financing, and all partners will have clear roles and responsibilities and be accountable. Enhanced collaboration among stakeholders will support healthy vaccine markets.

**Data-guided.** Data systems will be upgraded to better allocate resources within national immunization programmes, monitor use of resources and forecast vaccine demand, supply and pricing.

# STRATEGIC PRIORITY 7.

## Research & innovation

**Goal** Innovations to increase the reach and impact of immunization programmes are rapidly made available to all countries and communities.

- Objectives**
- Establish and strengthen capacity at all levels to identify priorities for innovation, and to create and manage innovation.
  - Develop new vaccines and technologies, and improve existing products and services for immunization programmes.
  - Evaluate promising innovations and scale up innovations, as appropriate, on the basis of the best available evidence.

**Key areas of focus**

**Needs-based innovation:** Strengthen mechanisms to identify vaccine-related research and priorities for innovation according to community needs, particularly for underserved populations, and ensure that the priorities inform innovations in immunization products, services and practices.

**New and improved products, services and practices:** Accelerate the development of new vaccines, technologies and improved products, services and practices, while ensuring continued progress in the development of vaccines for priority targets, including HIV, TB, malaria and emerging infectious diseases.

**Evidence for Implementation:** Shorten the path to maximum vaccine impact by implementation and operational research and through evidence-informed decisions on policy and implementation based on sound evidence of needs, benefits and risks.

**Local innovation:** Build local capacity to address programme challenges and maximize impact by cooperative creation, sourcing, adopting and scaling-up of innovations.

**Application of the core principles**

**People-centred.** Innovations in products, services and practices will be client-focused and address community and provider needs and preferences.

**Country-owned.** Countries will be able to identify, source and manage innovations in vaccines and immunization, including determining, documenting and communicating their priorities and identifying, evaluating and using local and global innovations. Country priorities will inform the global innovation agenda.

**Partnership-based.** Partners will devise ways to support the development, evaluation, use and sustainability of suitable immunization solutions, drawing on the complementary expertise of national and global stakeholders.

**Data-guided.** Evidence of unmet needs and the value of innovations in all aspects of immunization will be rigorously collected and shared to promote evidence-based research, development, execution and scale-up.



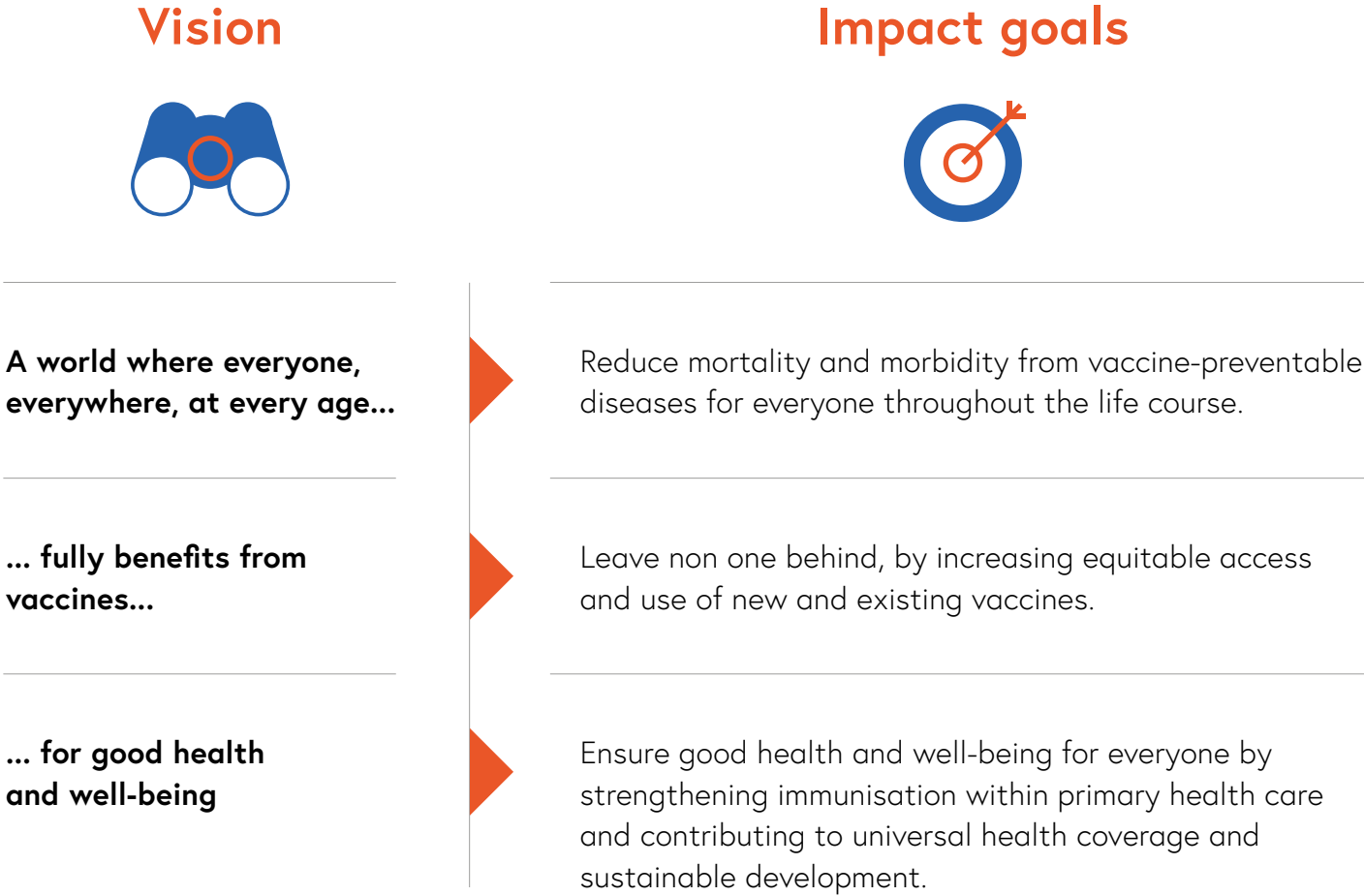
The background is a solid orange color with several thin, white, concentric circles of varying radii centered on the page. The text is white and bold, positioned in the center of the page.

# **IMPACT AND STRATEGIC GOALS**

4

Realizing the IA2030 vision will require achievement of the impact goals (Fig. 4).

**Figure 4.** Impact goals for the IA2030 vision



In addition, each strategic priority will have specific goals and objectives for evaluating progress in meeting the priorities (Table 2). The goals and objectives will complement existing disease-specific goals and also the broader health goals and the SDGs. They will mirror the ambition of existing commitments and galvanize work to make important gains in immunization over the coming decade.



**Table 2.** IA2030 strategic priority goals and objectives

Goals and objectives	
	<p><b>Strategic priority goal 1</b></p> <p>Effective, efficient and resilient immunization services are accessible to all people as an essential part of primary health care, and thereby contribute to universal health coverage.</p> <hr/> <p><b>Objectives</b></p> <ol style="list-style-type: none"> <li>1. Reinforce and sustain strong leadership, management and coordination of immunization programmes at all levels.</li> <li>2. Ensure the availability of an adequate, effective, sustainable health workforce.</li> <li>3. Build and strengthen comprehensive vaccine-preventable disease surveillance as a component of national public health surveillance system, supported by strong, reliable laboratory networks</li> <li>4. Ensure high-quality supply chains for vaccines and related commodities and effective vaccine management, within the primary health care supply system.</li> <li>5. Strengthen immunization information within a robust health information system, and promote use of high quality, and "fit-for-purpose" data for action at all levels.</li> <li>6. Establish and maintain a well-functioning vaccine safety system involving all stakeholders.</li> </ol>
	<p><b>Strategic priority goal 2</b></p> <p>Immunization is valued and actively sought by all people, and health authorities commit to ensuring that immunization is available as a key contributor to enjoyment of the highest attainable standard of health as a fundamental right.</p> <hr/> <p><b>Objectives</b></p> <ol style="list-style-type: none"> <li>1. Build and sustain strong political and financial commitment for immunization at all levels.</li> <li>2. Ensure that all people and communities value, actively support, and seek out immunization services.</li> </ol>
	<p><b>Strategic priority goal 3</b></p> <p>Everyone is protected by full immunization, regardless of location, age, socioeconomic status or gender-related barriers.</p> <hr/> <p><b>Objectives</b></p> <ol style="list-style-type: none"> <li>1. Extend immunization services to regularly reach "zero-dose" and under-immunized children and communities.</li> <li>2. Advance and sustain high and equitable immunization coverage nationally and in all districts.</li> </ol>

## Goals and objectives

### Strategic priority goal 4

All people benefit from recommended immunizations throughout the life course, effectively integrated with other essential health services.

#### Objectives

1. Strengthen immunization policies and service delivery throughout the life course, including for appropriate catch-up vaccinations and booster doses.
2. Establish integrated delivery points of contact between immunization and other public health interventions for different target age groups.

### Strategic priority goal 5

Immunization programmes can 1) anticipate, prepare for, detect, and rapidly respond to vaccine-preventable and emerging disease outbreaks, and 2) ensure immunization service delivery during acute emergencies and among communities affected by conflict, disaster and humanitarian crisis.

#### Objectives

1. Ensure preparation for, detection of, and rapid, high-quality response to vaccine-preventable disease outbreaks.
2. Establish timely and appropriate immunization services during emergencies, and in communities affected by conflict, disaster and humanitarian crisis.

### Strategic priority goal 6

All countries have a reliable supply of appropriate and affordable vaccines of assured quality, and sustainable financing for immunization programmes.

#### Objectives

1. Build and maintain healthy global markets across all vaccine antigens.
2. Ensure sufficient financial resources for immunization programmes in all countries.
3. Increase immunization expenditure from domestic resources in aid-dependent countries, and when transitioning away from aid, secure government funding to achieve and sustain high coverage for all vaccines.

### Strategic priority goal 7

Innovations to increase the reach and impact of immunization programmes are rapidly made available to all countries and communities.

#### Objectives

1. Establish and strengthen capacity at all levels to identify priorities for innovation, and to create and manage innovation.
2. Develop new vaccines and technologies, and improve existing products and services for immunization programmes.
3. Evaluate promising innovations and scale up innovations, as appropriate, based on the best available evidence.

As the IA2030 framework is adaptable and flexible, goals may be revised in response to major changes during the decade. The goals and objectives will be further refined in the monitoring and evaluation framework and will include indicators, targets and methods for evaluating progress.

The IA2030 goals will inspire action. In countries, action might include setting evidence-based, ambitious national targets and milestones for the decade. Regions might make plans to achieve the global goals by setting targets and milestones in regional vaccination action plans. Partner organizations might align their strategies and indicators towards attainment of the IA2030 goals.

Global, regional and national goal- and target-setting should be:

- ▶ aligned with the vision of IA2030;
- ▶ responsive to changing trends and conditions;
- ▶ aligned with broader health agendas (SDG3, primary health care and universal health coverage);
- ▶ ambitious but achievable and measurable to ensure accountability;
- ▶ linked to an action and a work plan; and
- ▶ designed to reinforce previous commitments (for example, the disease-specific goals listed in Table 1).





The background is a solid blue color with several faint, white, concentric circles of varying radii centered on the page. The circles are not perfectly circular and have a slightly irregular, hand-drawn appearance.

# **OPERATIONALIZATION**

53

IA2030 is an **overarching strategy** for establishing a **shared vision of and strategic priorities** for vaccines and immunization in order to guide the activities of countries and stakeholder organizations.

IA2030 must be contextualized within the global focus on improving access to good-quality, affordable primary health care as a foundation for achieving universal health coverage. The vision and strategy of IA2030 do not exist in isolation. It is backed by technical analyses and documentation, complementary strategies of stakeholder organizations, disease-specific initiatives and other global health and development programmes for steering national strategies and plans for vaccination.

Further, development of IA2030 will be a **multistep process**, starting with agreement on the vision, strategic priorities and high-level goals. The second step, translating the strategy into concrete actions, will require the development of regional and national operational plans; a mechanism to ensure ownership and accountability; and a monitoring and evaluation framework.

IA2030 will be adaptable to regional and national contexts. Thus, countries will prioritize various focus areas in each IA2030 strategic priority according to their situation. IA2030 will enable partners and stakeholders at all levels to align their work to ensure that all actions reinforce each other, in the pursuit of common goals.

## 5.1 Operational plans

The global strategy will become operational nationally, regionally and globally through its seven strategic priorities and four core principles.

**Nationally**, the IA2030 vision and strategies can be incorporated into national immunization strategies within national health planning. Countries will define their own targets and timelines to achieve IA2030 goals. Support from partners will be tailored to each context and integrated as much as possible into the strengthening of primary health care, achievement of universal health care and attainment of the SDGs.

**Regional vaccine action plans** will be updated to align them with the IA2030 vision and strategic priorities. Tailored support will be provided to countries according to the needs of national immunization programmes. Regional collaboration will involve stakeholders within and outside of immunization, to take advantage of synergies and promote integration.



**Globally**, operationalization of the IA2030 vision and strategy will focus on those components that are best coordinated globally, with alignment among stakeholders. It will require communication and advocacy to maintain momentum, mobilize support for IA2030 and for immunization more generally and promote acceptance of the IA2030 principles and strategic priorities.

## 5.2 Ownership and accountability

A mechanism will be necessary to ensure ownership accountability and definition of the roles and responsibilities of all stakeholders in delivering IA2030 vision and strategies. This will be a key objective in the second phase of IA2030 development.

## 5.3 Monitoring and evaluation framework

Drawing on the lessons learnt from GVAP, a robust monitoring and evaluation framework will be developed to measure progress towards the IA2030 vision and goals. It will be closely aligned with operational plans to ensure the greatest possible transparency and accountability.

The approach to achieving the IA2030 vision will be dynamic and responsive. While the vision and strategy will be constant throughout the decade, operational plans at national, regional and global levels will evolve with changing circumstances. Just as the battle against infectious diseases requires agile, flexible immunization programmes, a global vaccine and immunization strategy must also constantly adjust to changing needs and opportunities to respond to rapid shifts in disease epidemiology, technological advances, community needs, financial realities and political contexts.

# REFERENCES

1. Patel MK, Dumolard L, Nedelec Y, Sodha S, Steulet C, Kretsinger K, et al. Progress toward regional measles elimination – worldwide, 2000–2018. *Wkly Epidemiol Rec.* 2019;49: 581–600.
2. Vaccines and diseases. Geneva: World Health Organization; 2019 (<https://www.who.int/immunization/diseases/en>, accessed March 2020).
3. Strategic Advisory group of Experts on Immunization. The Global Vaccine Action Plan 2011–2020. Review and lessons learned. Geneva: World Health Organisation; 2019 (<https://apps.who.int/iris/bitstream/handle/10665/329097/WHO-IVB-19.07-eng.pdf?ua=1>, accessed March 2020).
4. Global burden of disease. Seattle (WA): Institute for Health Metrics and Evaluation; 2017.
5. Drolet M, Bénard E, Pérez N, Brisson M, on behalf of the HPV Vaccination Impact Study Group. Population-level impact and herd effects following the introduction of human papillomavirus vaccination programmes: updated systematic review and meta-analysis. *Lancet.* 2019;394(10197): 497–509.
6. Chang AY, Riumallo-Herl C, Perales NA, Clark S, Clark A, Constenla D, et al. The equity impact vaccines may have on averting deaths and medical impoverishment in developing countries. *Health Affairs (Millwood).* 2018;37(2):316–24.
7. Johns Hopkins University, International Vaccine Access Center. Methodology report: decade of vaccines economics (DOVE). Return on investment analysis. Medford (MA): Immunization Economics; 2019 (<https://static1.squarespace.com/static/556deb8ee4b08a534b8360e7/t/5d56d54c6dae8d00014ef72d/1565971791774/DOVE-ROI+Methodology+Report+16AUG19.pdf>, accessed March 2020).
8. Huber C, Finelli L, Stevens W. The economic and social burden of the 2014 Ebola outbreak in West Africa. *J Infect Dis.* 2018;218(suppl. 5): S698–704.
9. Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s. Geneva: World Health Organization; 2014.
10. Laxminarayan R, Matsoso P, Pant S, Brower C, Røttingen JA, Klugman K, et al. Access to effective antimicrobials: a worldwide challenge. *Lancet.* 2016;387:168–75.
11. Semenza JC, Sewe MO, Lindgren E, Brusin S, Aaslay KK, Mollet T, et al. Systemic resilience to cross border infectious disease threat events in Europe. *Transbound Emerg Dis.* 2019;66(5):1855–63.
12. Immunisation and the Sustainable Development Goals. Geneva: Gavi, the Vaccine Alliance; 2019 (<https://www.gavi.org/library/publications/gavi-fact-sheets/immunisation-and-the-sustainable-development-goals/>, accessed March 2020).
13. Progress and challenges with achieving universal immunization coverage. 2018 WHO/UNICEF estimates of national immunization coverage (data as of July 2019). Geneva: UNICEF, WHO; 2019 ([https://www.who.int/immunization/monitoring\\_surveillance/who-immuniz.pdf?ua=1](https://www.who.int/immunization/monitoring_surveillance/who-immuniz.pdf?ua=1), accessed March 2020).



