

Immunization Agenda 2030

Progress towards global immunization goals and implementation of the Immunization Agenda 2030

Report by the Director-General

1. In decision WHA73(9), the Seventy-third World Health Assembly decided: to endorse the new global vision and overarching strategy for vaccines and immunization: Immunization Agenda 2030; and to request the Director-General to continue to monitor progress and to report biennially as a substantive agenda item to the Health Assembly, through the Executive Board, on the achievements made in advancing towards the global goals of the Immunization Agenda 2030, starting with the Seventy-fifth World Health Assembly.

2. The Immunization Agenda 2030 (IA2030) Technical Progress Report for 2023,¹ summarized here, reports progress towards the goals established in 2022, outlines a series of high-level priorities, and sets out the implementation status of the Immunization Agenda 2030 at country, regional and global levels.

PROGRESS TOWARDS IMMUNIZATION AGENDA 2030 GOALS

3. The Immunization Agenda 2030 includes seven global-level indicators that track progress towards its three impact goals (Annex 1):

- (a) Reduce mortality and morbidity from vaccine-preventable diseases for everyone throughout the life course.
- (b) Leave no one behind, by increasing equitable access and use of new and existing vaccines.
- (c) Ensure good health and well-being for everyone by strengthening immunization within primary health care and contributing to universal health coverage and sustainable development.

4. In 2020 and 2021, the COVID-19 pandemic led to backsliding in multiple immunization indicators compared with pre-pandemic 2019 achievements. The pandemic caused significant supply-side and essential service delivery disruption, scarred health systems, burned out health workers and had demand-side consequences, with reduced uptake of available health services.

5. In 2022, the beginnings of a recovery were seen, with global coverage of three doses of diphtheria-, tetanus- and pertussis-containing vaccine (DTP3) increasing from 81% in 2021 to 84% in

¹ IA2030 Technical Progress Report 2023. Geneva: World Health Organization; 2023.

2022 but not yet reaching the 2019 level of 86%. The number of zero-dose children (not receiving any DTP doses) fell by 3.8 million, from 18.1 million in 2021 to 14.3 million in 2022, still well above the 2019 value of 12.9 million children, and 3.3 million (30%) above what was anticipated for 2022 had the Immunization Agenda 2030 trajectory been on track.

6. Furthermore, recovery has been very uneven between regions and countries. Least progress has been made in low-income countries and in the African Region. As a group, there was no increase in DTP3 coverage across 26 low-income countries between 2021 and 2022. In the African Region, the number of zero-dose children increased from 7.64 million in 2021 to 7.78 million in 2022 – a 25% increase since baseline year 2019. Within countries, little or no progress has been achieved in closing equity gaps, with the difference in coverage between the best-performing and worst-performing districts increasing in 2022 compared to baseline year 2019.

7. **Impact goal 1.1: Future deaths averted.** Modelling indicates that, between 2021 and 2030, an estimated 50 million future deaths in total will be averted by vaccination against 14 key pathogens,¹ if coverage targets are met. An estimated 4.1 million future deaths were averted in 2022 by vaccination, 9.3% fewer than targeted. Because of the failure to reach coverage targets in 2022, an estimated 422 000 additional future deaths from vaccine-preventable diseases will occur.

8. **Impact goal 1.2: Number of countries achieving regional or global control, elimination and eradication targets.** The status of efforts to achieve this goal is as follows:

- Wild poliovirus remains endemic in Afghanistan and Pakistan. Eight cases of wild poliovirus were detected in Mozambique in 2022, linked to a case in Malawi, detected in 2021 and thought to have been imported from Pakistan. As there is no evidence of sustained transmission, the Region's eradication status has not been affected.
- Based on the most recent reports submitted by National Verification Committees to Regional Verification Commissions, 83 countries (43%) have been verified for measles elimination, a slight increase on previous reports.
- Globally, 51% of countries have achieved rubella elimination. In 2022, two countries were newly verified as having achieved rubella elimination.
- As at the end of 2022, 12 countries had yet to eliminate maternal and neonatal tetanus (no change from 2021).

9. **Impact goal 1.3: Number of large or disruptive vaccine-preventable disease outbreaks.** The number of large or disruptive outbreaks of measles, cholera and meningococcal disease increased in 2022 compared with 2021; remained stable for wild polioviruses and Ebola; and showed a slight decline for circulating vaccine-derived polioviruses (cVDPVs) and a marked decline for yellow fever.

10. **Impact goal 2.1: Numbers of zero-dose children.** The numbers of zero-dose children fell from 18.1 million in 2021 to 14.3 million in 2022. However, numbers remain 11% higher than in baseline year 2019 (12.9 million).

¹ Diphtheria, hepatitis B virus, *Haemophilus influenzae* type b, human papillomavirus, Japanese encephalitis virus, *Neisseria meningitidis* serogroup A, pertussis, *Streptococcus pneumoniae* (pneumococcal conjugate vaccine, PCV), rotavirus, tetanus, tuberculosis (BCG vaccine) and yellow fever.

11. **Impact goal 2.2: Introduction of new or under-utilized vaccines in low- and middle-income countries.** Excluding COVID-19 vaccines, new vaccine introductions in low- and middle-income countries increased in 2022 compared with 2020 and 2021 (22 in 2020; 39 in 2021; 45 in 2022). The highest number of new introductions in 2022 were as follows: second dose of inactivated polio vaccine (IPV2); human papillomavirus vaccine (HPV); and second dose of measles-containing vaccine (MCV2).

12. **Impact goal 3.1: Vaccination coverage across the life course.** Global coverage for all four indicators used to assess vaccination coverage at different life stages¹ increased between 2021 and 2022; for all except DTP3, coverage in 2022 exceeded 2019 baseline levels. Coverage varied between regions, especially for third dose of pneumococcal vaccine (PCV3) (23% to 83%) and complete course of vaccination with human papillomavirus vaccine (HPVc) (0.2% to 52%).

13. **Impact goal 3.2: Universal Health Coverage service coverage index.** The proportion of one-year-old children vaccinated with DTP3 is a tracer indicator in the reproductive, maternal, newborn and child health component of the Universal Health Coverage service coverage index. The population-weighted global service coverage index score increased from 45 to 68 out of 100 between 2000 and 2021. Recent progress in coverage has slowed compared with pre-2015 gains, rising only three index points between 2015 and 2021. This pattern of stagnation meant that 4.5 billion people were not fully covered by essential health services.²

14. **Immunization Agenda 2030 strategic priority programme performance indicators:** The indicators for the 15 global strategic priority objectives – a combination of measures for inputs, processes, outputs and outcomes – track performance at country, regional and global levels. No global targets have been set, due to wide country and regional variations. Annex 2 shows baseline and the latest available data for these indicators.

15. Globally, the 2022 breadth of vaccination coverage indicator, measuring the average coverage of vaccines targeting 11 diseases across multiple ages,³ increased to 72%, exceeding the 2019 baseline level (71%). However, the extent of recovery varied between regions, being smallest for the African Region.

16. At subnational level, equity gaps continued to grow in 2022. For third dose of diphtheria, tetanus and pertussis-containing vaccine (DTP3), first dose of measles-containing vaccine (MCV1) and second dose of measles-containing vaccine (MCV2), coverage in 2022 in the highest-performing 20% of districts surpassed 2019 baseline levels, while coverage in the lowest-performing 20% of districts remained significantly lower than at baseline.

17. Overall, immunization showed initial signs of recovery in 2022. However, recovery was uneven, not seen in all countries, and certain groups of countries (e.g. low-income countries) saw minimal or no progress. In addition, within countries, equity remains a major challenge, with little improvement in coverage in underserved populations.

¹ DTP3 (year 1), second dose of measles-containing vaccine (MCV2) (year 2), third dose of pneumococcal conjugate vaccine (PCV3, childhood), and the complete course of human papillomavirus vaccine (HPVc, adolescence).

² Tracking universal health coverage: 2023 global monitoring report. Geneva: World Health Organization and International Bank for Reconstruction and Development/The World Bank; 2023 (accessed 25 October 2023).

³ Diphtheria, tetanus, pertussis, human papillomavirus, hepatitis B virus, Haemophilus influenzae type B, poliovirus, measles, pneumococcus, rubella and rotavirus.

IMPLEMENTATION OF THE IMMUNIZATION AGENDA 2030

18. At the Seventy-fourth World Health Assembly in May 2021, many Member States expressed support for the implementation of the Immunization Agenda 2030 through the Framework for Action. The Framework for Action detailed how coordinated operational planning, monitoring and evaluation, ownership and accountability, and communications and advocacy are key drivers for implementation and impact on the ground. It emphasizes the particular role of regions and countries.

19. Regions have finalized or are developing regional strategies aligned with the Immunization Agenda 2030, with input from Regional Immunization Technical Advisory Groups, including regional monitoring and evaluation frameworks.

20. Through the National Immunization Strategy initiative, WHO and partners are supporting countries in the development of new immunization strategies aligned with the Immunization Agenda 2030. In total, 23 countries have developed a National Immunization Strategy and 18 countries are in the process of finalizing their Strategies. An additional 35 countries are planning to develop Strategies over the period 2023–2024.

21. The Immunization Agenda 2030 Partnership Council, which consists of 17 senior leaders, including representatives of countries, regions, global bodies and civil society, met twice in 2022. The Partnership Council expanded its membership to include three non-representational members, endorsed the Essential Immunization Recovery Plan and approved the integration of the Measles & Rubella Partnership into the Immunization Agenda 2030 architecture.

22. Day-to-day management of the Immunization Agenda 2030 is the responsibility of the Coordination Group, which meets monthly, supported by a small virtual secretariat. The Coordination Group has 10 director-level members from partner organizations.

23. A first global partners meeting was held in Geneva in February 2023. It identified a need to strengthen Immunization Agenda 2030 regional coordination structures to ensure that partner support is coordinated and effectively tailored to country needs.

24. Some Immunization Agenda 2030 working groups are taking forward technical work across the seven strategic priorities. Others are focusing on cross-cutting areas, such as monitoring and evaluation, and communications and advocacy.

25. As well as supporting the “Big Catch-Up” initiative, working group activities in support of Immunization Agenda 2030 goals in 2022 included development of resources to facilitate integration of immunization and other primary health care services and a series of webinars on immunization across the life course.

26. Annex 3 provides an overview of key bodies involved in the Immunization Agenda 2030. The global-level partnership is described in detail in Annex 2 to the Framework for Action.¹

¹ Implementing the Immunization Agenda 2030: A Framework for Action through Coordinated Planning, Monitoring & Evaluation, Ownership & Accountability, and Communications & Advocacy (<http://www.immunizationagenda2030.org/framework-for-action>, accessed 26 October 2023).

A COORDINATED GLOBAL RESPONSE

27. The Immunization Agenda 2030 Technical Progress Report for 2022, summarizing immunization data for 2021, showed an alarming backsliding in immunization coverage and a substantial increase in the number of zero-dose children. The report included an action agenda – a set of 12 priority areas where urgent action was required to halt and reverse the backsliding.

28. Responding to this action agenda, many countries, regions and global partners have taken steps to make up lost ground, resulting in some improvements in 2022.

29. At the start of 2023, global partners launched the “Big Catch-Up” initiative to support countries to reach children who had missed out on vaccination during the pandemic years, and to restore the immunization trajectory toward Immunization Agenda 2030 goals. This initiative is based on three pillars:

- Catch-up: reach children who missed out on vaccination during the pandemic years.
- Restore: return vaccination coverage to at least 2019 levels.
- Strengthen: build the capacity of immunization programmes, within primary health care systems, to reduce the number of children in future birth cohorts who miss out on vaccination and to resume the trajectory of performance towards attaining Immunization Agenda 2030 goals.

CONCLUSIONS AND NEXT STEPS

30. The COVID-19 pandemic and a wide range of other environmental and geopolitical challenges have had a highly damaging impact on immunization. Millions of additional young children (and adolescents and adults) are now at risk of life-threatening vaccine-preventable diseases.

31. In 2022, declining global coverage of key indicators, such as DTP3, was halted and reversed, almost returning to levels seen in baseline year 2019.

32. However, recovery has been very uneven across countries, with low-income countries in particular yet to see significant recovery.

33. Within countries, minimal progress has been made in achieving vaccine equity, and gaps between the best-served and least-served districts continue to expand.

34. The Immunization Agenda Technical Progress Report for 2023 includes a shared action agenda, with six short-term priority areas to align the efforts of countries, regions, global partners and other stakeholders, as set forth below.

- (1) Catch-up and strengthening: intensify efforts to reach children missed during the pandemic years and strengthen national immunization programmes for all vaccination needs across the life course.
- (2) Promoting equity: ensure that catch-up and strengthening activities specifically benefit communities that are currently most left out.

(3) Regaining control of measles: enhance measles outbreak responses and intensify prevention, especially within the context of sustainable strengthened national immunization programmes.

(4) Making the case for investment and integration into primary health care: strengthen advocacy at national, regional and global levels for increased investment in immunization, integrated into primary health care and as part of systems for health.

(5) Accelerating new vaccine introduction: promote implementation of vaccines recommended by WHO where they have yet to be introduced.

(6) Advancing vaccination in adolescence: accelerate introduction of human papillomavirus vaccination where it is not yet in national programmes, and increase coverage where it has already been introduced.

35. Refinement of the Immunization Agenda 2030 operational model will continue to shift the focus to the regional level, to facilitate coordinated and tailored support to countries based on their local contexts and needs.

36. In-depth reviews led by the Immunization Agenda 2030 working groups and other activities will collate evidence in priority areas and generate recommendations for global partners and other stakeholders.

ACTION BY THE EXECUTIVE BOARD

37. The Board is invited to note the report. It is further invited to provide comments and guidance in respect of the questions set out below.

- What actions can global partners take to support countries to accelerate progress in the six priority areas highlighted above (paragraph 34 above)?
- How can countries strengthen their political and financial commitments to immunization within integrated primary health care systems, which is a key enabler of universal health coverage, improved population health and pandemic preparedness?

ANNEX 1

IA2030 IMPACT GOAL (IG) INDICATORS AND TARGETS, BASELINE AND 2022 DATA

Impact Goal	Indicator	2030 target	2022 Progress from baseline ^a <i>Unless otherwise noted, 2019 is the baseline</i>																															
1 Prevent disease	1.1 Number of future deaths averted through immunization	50 million future deaths averted by immunization in 2021–2030 ^b	<p>2030 target</p> <p>12.22 M (cumulative, 2020–2022)</p> <p>4.10 M in 2022 (9.3% lower than annual target)</p> <p>50 M</p>																															
	1.2 Number and proportion of countries achieving regional or global VPD control, elimination, and eradication targets	All countries achieve targets Eradication target for polio (WPV) and elimination targets for measles, rubella and maternal and neonatal tetanus (MNT). Additional VPD targets may be added in future years.	<p>WPV 99% (192 out of 194)</p> <p>Measles 43% (83 out of 194)</p> <p>Rubella 51% (98 out of 194)</p> <p>MNT 94% (182 out of 194)</p>																															
	1.3 Number of large or disruptive VPD outbreaks	Declining trend in the annual number of large or disruptive VPD outbreaks	<table border="1"> <thead> <tr> <th>VPD</th> <th>2018–2020 annual avg.</th> <th>2022</th> <th>Trend</th> </tr> </thead> <tbody> <tr> <td>Cholera</td> <td>1</td> <td>5</td> <td>↑</td> </tr> <tr> <td>Ebola</td> <td>1</td> <td>0</td> <td>↓</td> </tr> <tr> <td>Measles</td> <td>51</td> <td>37</td> <td>↓</td> </tr> <tr> <td>Meningococcus</td> <td>2</td> <td>4</td> <td>↑</td> </tr> <tr> <td>cVDPV</td> <td>22</td> <td>32</td> <td>↑</td> </tr> <tr> <td>WPV</td> <td>2</td> <td>3</td> <td>↑</td> </tr> <tr> <td>Yellow Fever</td> <td>4</td> <td>1</td> <td>↓</td> </tr> </tbody> </table>	VPD	2018–2020 annual avg.	2022	Trend	Cholera	1	5	↑	Ebola	1	0	↓	Measles	51	37	↓	Meningococcus	2	4	↑	cVDPV	22	32	↑	WPV	2	3	↑	Yellow Fever	4	1
VPD	2018–2020 annual avg.	2022	Trend																															
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2 Promote equity	2.1 Number of zero-dose children	50% reduction in number of zero-dose children	<p>6.2 M (2030 target)</p> <p>2019 (baseline) 12.9 M</p> <p>2022 14.3 M</p> <p>1.4 M (10.9%) increase</p>																															
	2.2 Introduction of new or under-utilized vaccines in low- and middle-income countries	500 vaccine introductions by decade's end	<p>500 (2030 target)</p> <p>45 237 (cumulative) 47% of target</p> <p>COVID-19, 2020–2021 Routine, 2020–2021 Routine, 2022</p>																															
3 Build strong immunization programmes	3.1 Vaccination coverage across the life course	90% coverage of full course for selected vaccines	<p>DTP3 86% 84%</p> <p>MCV2 71% 74%</p> <p>PCV3 51% 60%</p> <p>HPVc 14% 15%</p> <p>90% (2030 target)</p>																															
	3.2 UHC Service Coverage Index	Universal Health Coverage increase in all countries, regions and globally	<p>Global baseline: 68 2021 average: 68</p> <p>No. of regions: 1 (Increase), 5 (No change)</p> <p>No. of countries: 68 (Increase), 55 (No change), 71 (Decrease)</p> <p>2021 change from baselines. Increase No change Decrease</p>																															

^a Indicators with figures in orange are “off-track” to meet 2030 targets and with figures in blue are “on-track”.

^b Estimates exclude deaths averted due to COVID-19 vaccination.

ANNEX 2

**STRATEGIC PRIORITY (SP) PROGRAMME PERFORMANCE INDICATORS,
BASELINE AND 2022 DATA^a**

Strategic Priority	Indicator	2022 data <i>Unless otherwise noted, 2021 is indicator baseline</i>
1 Immunization Programmes for Primary Health Care and Universal Health Coverage	1.1 Proportion of countries with evidence of adopted mechanism for monitoring, evaluation and action at national and subnational levels	Data forthcoming in 2023
	1.2 Density of physicians, nurses and midwives per 10 000 population ^b	53.7 health workers per 10 000 population ^c (Physicians: 16.9; nurses/midwives: 36.9) <i>2019 baseline: 56.4 (17.4 physicians and 39 nurses/midwives)</i>
	1.3 Proportion of countries with on-time reporting from 90% of districts for suspected cases of all priority VPDs included in nationwide surveillance ^b	38% (9 out of 24 pilot countries reported ≥90% timely reporting from ≥90% of districts or other administrative levels)
	1.4 Proportion of time with full availability of DTP and MCV at service delivery level ^b	35% (67 out of 194 countries) ^d
	1.6 Proportion of countries with at least one documented (with reporting form and/or line-listed) individual serious adverse event following immunization (AEFI) case safety report per million total population	47% (92 out of 194 countries) <i>2019 baseline: 28% (54 out of 194)</i>
2 Commitment & Demand	2.1 Proportion of countries with legislation in place that is supportive of immunization as a public good ^b	59% (115 out of 194 countries)
	2.2 Proportion of countries that have implemented behavioural or social strategies (i.e., demand generation strategies) to address under-vaccination ^b	45% (87 out of 194 countries)
3 Coverage & Equity	3.2 DTP3, MCV1, and MCV2 coverage in the 20% of districts with lowest coverage (mean across countries)	69% DTP3, 66% MCV1, 57% MCV2 <i>2019 baseline: 74% DTP3, 72% MCV1, 64% MCV2</i>
4 Life Course & Integration	4.1 Breadth of protection (mean coverage for all WHO-recommended vaccine antigens)	72% <i>2019 baseline: 71%</i>
5 Outbreaks & Emergencies	5.1 Proportion of polio, measles, meningococcus, yellow fever, cholera, and Ebola outbreaks with timely detection and response	18% (7 out of 40 outbreaks; excluding polio) <i>average 2018–2020 baseline: 25%</i>
6 Supply & Sustainability	6.1 Health of vaccine markets, disaggregated by vaccine antigens and country typology	Data forthcoming in 2023
	6.2 Proportion of countries whose domestic government and donor expenditure on primary health care increased or remained stable	83% (20 out of 24 countries, 2019 to 2020) <i>2018–2019 baseline: 75% (18 out of 24)</i>
	6.3 Proportion of low- and middle-income countries whose share of national immunization schedule vaccine expenditure funded by domestic government resources increased or remained stable ^e	61% (34 out of 56 countries, 2021 to 2022) <i>2018–2019 baseline: 68% (38 out of 56)</i>

Strategic Priority	Indicator	2022 data <i>Unless otherwise noted, 2021 is indicator baseline</i>
7 Research & Innovation	7.1 Proportion of countries with an immunization research agenda ^b	13% (26 out of 194 countries)
	7.2 Progress towards global research and development targets	Data forthcoming in 2024

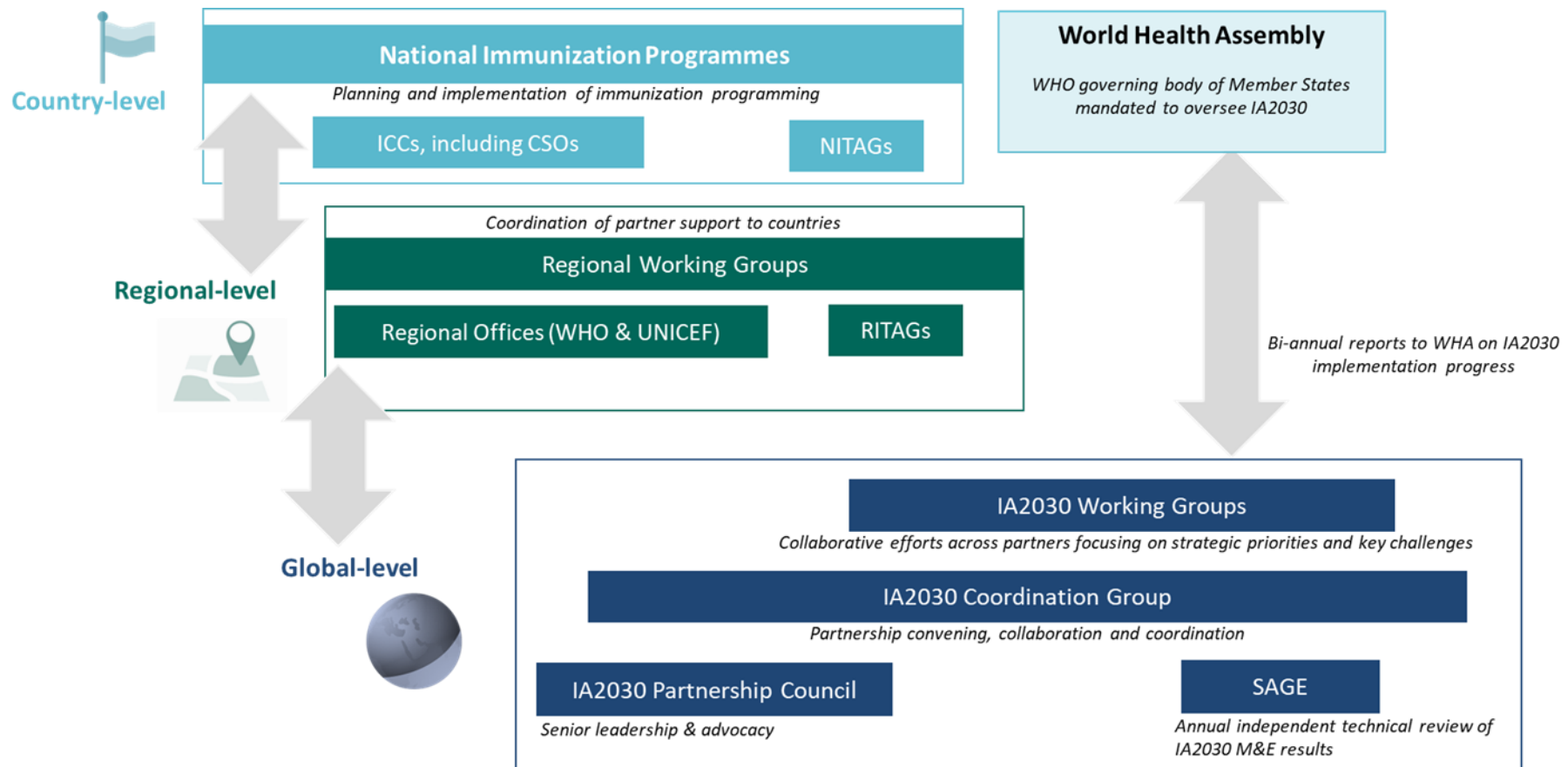
^a Table only includes strategic priority objectives for which global indicators have been specified; no global indicators have been specified for strategic priority objective 1.5 or 3.1.

^b Indicators based on questions from the new electronic WHO/UNICEF Joint Reporting Form on Immunization (eJRF) piloted in 2021. Data have limitations due to novelty of the indicators and ability of countries to report on them. Questions will be revised in the light of lessons learned during piloting.

^c 2020 data used because 2022 data are not yet available.

^d Reported at the district level; further discussions will be held to refine the indicator. Estimate excludes domestic expenditure on COVID-19 vaccination.

ANNEX 3

RELATIONSHIPS BETWEEN KEY IA2030 STAKEHOLDERS¹

¹ CSO: civil society organization; ICCs: Inter-agency Coordinating Committees; NITAGs: National Immunization Technical Advisory Groups; RITAGs: Regional Immunization Technical Advisory Groups; SAGE: Strategic Advisory Group of Experts on Immunization.