

No	Goal	Indicator	Operational definition	Data source/ collection	Baseline	Target	Milestones
G 1.1	Achieve a world free of poliomyelitis	Interrupt wild poliovirus transmission globally	No wild poliovirus isolated globally for at least 1 year, in the presence of certification quality AFP surveillance (annual non-polio AFP rate of at least 1/100,000 population < 15 years at national and sub-national level, with adequate stool specimens collected from at least 80% of AFP cases).	national AFP surveillance systems + supplementary surveillance data where available (environmental surveillance or enterovirus surveillance through national lab networks)	2011: 650 WPV-confirmed cases reported from 16 countries	2014	
G1.2		Certification of poliomyelitis eradication	no wild poliovirus isolated globally for at least 3 years in the presence of certification quality AFP surveillance	final national documentation on polio-free status submitted by NCCs and accepted by RCCs	2011: national documentation on polio-free status accepted by RCCs in 168 out of 194 WHO member states (87%)	2018	Track number of countries with national documentation of polio-free status, accepted by RCCs
G2.1	Meet global and regional elimination targets	Neonatal tetanus elimination	< 1 NT case/1,000 live births in each district and maintenance of elimination based on annual WHO/UNICEF District Data Spreadsheet	WHO/UNICEF District Data Spreadsheet, and WHO validation report (based on LQA in worst performing district)	2010 (40 countries still to achieve elimination)	2015	10 countries eliminated NT by 2012; 22 countries eliminated NT by 2013; 36 countries eliminated NT by 2014; 40 countries eliminated NT by 2015
G2.2		Measles elimination	number of regions with 100% of countries having declared interruption of endemic measles virus transmission for a period of > 12 months in the presence of high quality surveillance The surveillance quality criteria published in the WER 2010; 85(49): 490-5 http://www.who.int/entity/wer/2010/wer8549.pdf will be used to define high quality surveillance as follows: 1. Rate of discarded measles cases*	each region has a verification commission which annually reviews the status of all countries	2010 (0/5 regions - AMRO, WPRO, EMRO, EURO, AFRO)	2015: 4 WHO regions	Monitor # and % of countries in each region that are verified as having eliminated diseases

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	Meet global and regional elimination targets		(target: ≥ 2 per 100,000 population per year) 2. Proportion of subnational admin units (province / region) reporting at least 2 discarded measles cases* per 100,000 population (goal: 80%) 3. Proportion of suspected cases where specimens adequate for serology were collected** (goal: 80%) 4. Proportion of laboratory-confirmed outbreaks where specimens adequate for measles virus detection were collected (goal: 80%) 5. Proportion of suspected measles cases with an adequate investigation*** initiated within 48 hours of notification (goal: 80%)			2020: 5 WHO regions	Monitor # and % of countries in each region that are verified as having eliminated diseases
G2.3		Rubella/CRS elimination	number regions with 100% of countries having declared interruption of endemic rubella virus transmission for a period of > 12 months without occurrence of CRS cases associated with endemic transmission in the presence of high quality surveillance	each region has a verification commission which annually reviews the status of all countries	2010 (0/2 regions - AMRO, EURO)	2015: 2 WHO regions	Monitor # and % of countries in each region that are verified as having eliminated diseases
						2020: 5 WHO regions	Monitor # and % of countries in each region that are verified as having eliminated diseases

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G3.1	Meet vaccination coverage targets in every region, country and community	Reach 90% national coverage and 80% in every district or equivalent administrative unit for diphtheria-tetanus-pertussis-containing vaccines	WUENIC* for national coverage; District data: - accept JRF admin data if WUENIC based on administrative coverage; missing district reports =indicator not met, encourage reporting; –if WUENIC not based on administrative coverage, repeated measure (at least two surveys or special studies to document district coverage); early measure (2009 to 2015) and later measure (2016 to 2020)	WUENIC, JRF, surveys or special studies	2010 or early measure	2015 - all Member states	Monitor trends in coverage
		Number of low- and middle-income countries that have introduced one or more new or underutilized vaccines	low- and middle-income countries= world bank classification 2012; - vaccine added in national immunization schedule and used for a sustained period of at least 12 months (excluding those used only in the private sector and not in national immunization schedule; includes vaccines included in national schedule but for selective use at risk populations, e.g. seasonal influenza); - new and underutilized vaccines = all vaccines that were not previously in national immunization schedule	World Bank, JRF	2010	2015: at least 80	Monitor trends in vaccine introduction

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G3.2	Meet vaccination coverage targets in every region, country and community	Reach 90% national coverage and 80% in every district or equivalent administrative unit for all vaccines in national programmes, unless otherwise recommended	<p>WUENIC for national coverage; Coverage refers to coverage with primary series of vaccine. For pneumo and rota vaccines, this will be coverage with primary series by 12 months of age. For other vaccines, the exact measurement of coverage needs to be defined, but will be as reported in the WUENIC. District data: - accept JRF admin data if WUENIC based on administrative coverage; •Missing district reports =indicator not met, encourage reporting;</p> <p>–if WUENIC not based on administrative coverage, repeated measure (survey or special study to document district coverage); •Early measure (2009 to 2015) •Later measure (2016 to 2020)</p> <p>-- applied to all vaccines being used for country-wide, universal immunization (exception of HPV, where country-wide universal immunization of girls would be included)</p>	WUENIC, JRF	2010 or early measure (for district data)	2020: All Member States	Monitor trends in coverage
G4.1	Develop and introduce new and improved vaccines and technologies	Licensure and launch of vaccine or vaccines against one or more major currently non-vaccine preventable diseases.	<p>Licensure relates to registration by a functional NRA</p> <p>Launch is defined as addition of the vaccine to the national immunization schedule in one or more low or middle income countries (WB definition) and sustained for a period of at least 12 months. Excludes use only in the private sector. Includes vaccines in national schedule that may be selectively used in "at risk" populations</p>	annual surveys with NRA's; JRF for launch of vaccine; WB for definition of low and middle income countries	0	2020: one or more	Incremental progress (i.e. number of products in phase 1, 2 or 3 clinical trials) on development to be reported and assessed by IRG

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G4.2	Develop and introduce new and improved vaccines and technologies	Licensure and launch of at least one new platform delivery technology	Licensure relates to registration by a functional NRA; New platform delivery technology is defined as a new mechanism for delivering vaccines to individual recipients that facilitates coverage, improves performance, or reduces cost of vaccine or delivery, e.g. jet injectors, microneedles, aerosol etc.; - launch as defined for new vaccine introduction (see above indicator)	annual surveys with NRA's; JRF for launch; WB for definition of low and middle income countries	0	2020: one or more	Incremental progress on development (i.e. number of products in phase 1, 2 or 3 clinical trials) to be reported and assessed by IRG
G4.3		Number of low- and middle-income countries that have introduced one or more new or underutilized vaccines	low- and middle-income countries= world bank classification 2012;- vaccine added in national immunization schedule and used for a sustained period of at least 12 months (excluding those used only in the private sector and not in national immunization schedule; includes vaccines included in national schedule but for selective use at risk populations, e.g. seasonal influenza); - new and underutilized vaccines = all vaccines that were not previously in national immunization schedule	World Bank, JRF	2010	2015: at least 80 at least 90	Monitor trends in vaccine introduction
G5.1	Exceed the Millennium Development Goal 4 target for reducing child mortality	Reduce under five mortality rate	IGME estimates of child mortality			2015: 2/3 reduction compared to 1990	Monitor trends
						2020: exceed 2015 target	
*WUENIC= WHO UNICEF Estimates of National Immunization Coverage							

Strategic objective		Indicator	Operational definition	Data source/ collection	Baseline	Target	Milestones
SO1.1	All countries commit to immunization as a priority	Presence of a legal framework or legislation that guarantees immunization financing					
		Domestic resources allocated for immunization Domestic expenditures for immunization per immunized person	Immunization expenditure from national domestic resources, as reported in the JRF Size of target populations as reported in JRF	JRF	reported expenditure for 2010	increasing trend in country allocation to national immunization programmes	Monitor and report trends
SO1.2		Presence of an independent technical advisory group that meets defined criteria	National Immunization Technical Advisory Groups meeting all WHO criteria of functionality Criteria of functionality are as described in the WHO/UNICEF JRF	JRF	2010	Functional National Immunization Technical Advisory Groups in all countries	Increasing trend in number of countries with functional NITAGs
SO 2.1	Individuals and communities understand the value of vaccines and demand immunization both as a right and a responsibility	% of countries that have assessed (or measured) the level of confidence in vaccination at subnational level with implementation of activities to improve it.	Definition of vaccine confidence: Trust in the usefulness and safety of vaccines and in the system that delivers them. Vaccination confidence exists on a continuum, and is one of the factors that influences behavior ranging from acceptance to refusal.	JRF		Increasing trend	Monitor and report trends
SO 2.2		% of un- and under-vaccinated in whom lack of confidence was a factor that influenced their decision.	Operational definition to determine % with "lack of confidence" is yet to be defined	JRF		Decreasing trend in % with lack of confidence	Monitor and report trends

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SO3.1	The benefits of immunization are equitably extended to all people	Percentage of districts with less– <u>80% or greater</u> coverage with 3 doses of diphtheria-tetanus-pertussis-containing vaccine	JRF admin data if WUENIC based on administrative coverage; missing district reports = indicator not met, encourage reporting; –if WUENIC not based on administrative coverage, repeated measure (survey or special study to document district coverage); at least two measures, with early measure (2009 to 2015) and later measure (2016-2020)	JRF annual, or special studies/ surveys for repeated measures;	2010 or early measure	All countries with all districts ≥ 80% DTP3 coverage by 2020	Monitor trends in number of countries meeting the target
SO3.2		Reduction in coverage gaps between wealth quintiles (AND another appropriate equity indicator)	All countries to identify and reduce inequity of immunization in at least one domain or demonstrate equity by wealth quintile; If wealth quintile is used should report coverage across all quintiles and not just lowest and highest quintile Data collection by repeated measure (special study or survey), with at least two measurements, early measure (2009-2015) and late measure (2016-2020)	household survey or special study representative of entire population	early measure	Increasing trend in equity in immunization coverage. Proposed target to align with GAVI targets: proportion of countries with < 20% difference in coverage between wealth quintiles 60% by 2015 & 75% by 2020	Increasing trend in equity in immunization coverage

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SO4.1	Strong immunization systems are an integral part of a well-functioning health system	DTP1 to measles first dose dropout rate	Difference between % coverage with DTP 1 and % coverage with MCV1	WUENIC	2010	Decreasing trend in drop out rate	Trends in drop-out rates
SO4.2		Immunization coverage data assessed as high quality by WHO and UNICEF	Use qualitative assessment of data quality in WUENIC, based on nationally reported data, consistency in data on estimates of size of target population, and consistency between estimates from administrative and other data sources (surveys and other programmatic information)	WUENIC Grade of Confidence	2010	All countries to have high quality immunization coverage data by 2020	Monitor trends in number of countries meeting the target
SO 4.3		Percentage of routine immunization costs financed through government budgets Number of countries that have established surveillance, with laboratory confirmation, for invasive bacterial diseases and rotavirus diarrhoea and report data to WHO	As defined in JRF # countries reporting that they have established surveillance in the JRF and whose reports are included in WHO databases	JRF and surveillance reports to WHO		75% of low and middle income countries by 2020	Increasing trend

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SO5.1	Immunization programmes have sustainable access to predictable funding, quality supply and innovative technologies	Installed capacity for production of universally recommended vaccines within five years of licensure/potential demand					
		Percentage of doses of vaccine of assured quality, produced, procured and used worldwide	Number of doses of vaccines of assured quality used in a country (licensed by functional NRA)/ total doses of vaccines used in national immunization programme	JRF. Assessment by QSS whether vaccines used in country qualify to be considered of "assured quality"	2010	100% of doses vaccines by 2020	Increasing trend
SO5.2		Sufficient doses procured to meet stated program requirements	# of vaccine doses procured/# of vaccine doses required in low and middle income countries				
SO6.1	Country, regional and global research and development innovations maximize the benefits of immunization	Progress towards development of HIV, TB, and malaria vaccines	number of HIV, TB, and malaria-vaccine clinical trials assessing clinical efficacy completed and with results reported	WHO; NIH and other clinical trial registries		Proof of concept for a vaccine that shows greater or equal to 75% efficacy for HIV/AIDS, tuberculosis, or malaria vaccines.	Narrative report on progress in development of these vaccines

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SO6.2	Country, regional and global research and development innovations maximize the benefits of immunization	Progress towards a universal influenza vaccine (protecting against drift and shift variant)	number of influenza clinical trials assessing clinically the breadth of protection completed and reported			at least one vaccine providing broad spectrum protection against influenza A virus licensed	Narrative report on progress in development of these vaccines
SO 6.3		Progress towards institutional and technical capacity to make vaccines and/or carry out related vaccine clinical trials, operational and organizational research	number of countries per WHO region having reported conduct of a vaccine clinical trials	WHO; NIH and other clinical trial registries		Every Region has a solid base of countries competent in hosting and managing vaccine trials.	
SO 6.4		Number of vaccines that have either been re-licensed or licensed for use in a controlled temperature chain (CTC) at temperatures above the traditional 2-8 C range	As define in indicator	PQS data base	incremental above 2010		Increasing number of vaccines
SO 6.5		Number vaccine delivery technologies (devices & equipment) that have <u>received</u> WHO pre-qualification against the 2010 baseline	Four categories of equipment would be tracked: Refrigerators and freezers Cold boxes and vaccine carriers Coolant packs Temperature monitoring devices	PQS data base	incremental above 2010		Increasing number of technologies