

Routine immunization profile

WHO European Region

Progress towards achieving European Vaccine Action Plan goals, 2017

Goal	Indicator	Status
1	Sustain polio-free status ^a <i>Eliminated polio</i> <i>Current risk: Low/Intermediate/High</i>	On track 53 countries 29/21/3 countries
2	Eliminate measles and rubella ^b <i>Measles transmission: Eliminated/Interrupted ≥ 12 months/Endemic</i> <i>Rubella transmission: Eliminated/Interrupted ≥ 12 months/Endemic</i>	Not achieved 37/6/10 countries 37/5/11 countries
3	Control hepatitis B infection ^c	Validation pending
4	Meets vaccination coverage targets <i>DTP3 national immunization coverage ≥95%^d</i> <i>≥90% DTP3 coverage achieved in ≥90% of districts^e</i>	At risk 32 countries 22 countries
5	Make evidence-based decisions about introduction of new vaccines ^e <i>NITAG made a recommendation about PCV</i> <i>NITAG made a recommendation about RV</i> <i>NITAG made a recommendation about HPV</i>	On track 37 countries 28 countries 36 countries
6	Achieve financial sustainability of national immunization programmes ^c <i>Financially self-sufficient for procuring routine vaccines</i>	On track 50 countries

Demographic and income classification summary, 2017

Number of countries	53
Total population ^f	919 457 593
Live births	11 096 577
Surviving infants	11 002 745
<5 years	56 315 482
<15 years	164 982 554
Low income countries ^g	1 (2%)
Middle income countries ^g	20 (38%)
High income countries ^g	32 (60%)

Immunization system characteristics, 2017

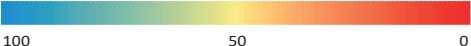
Characteristic	N (%)
Countries with ≥ 95% DTP3 coverage ^d	32 (60)
Countries with sustained DTP3 coverage of ≥ 95% in last 3 years ^d	27 (51)
Countries with sustained access to WHO accredited polio, measles, and rubella laboratories ^h	53 (100)
Countries with NITAG in place that meets the six WHO criteria ^e	36 (68)
Countries with national system to monitor AEFIs ^e	50 (94)
Countries with communication plan to respond to vaccine safety-related events ^e	29 (55)
Countries with vaccine hesitancy assessment performed within last 5 years ^e	29 (55)
Countries with mandatory proof of immunization at school entry ^e	21 (40)

Note: The six WHO NITAG criteria are 1. legislative or administrative basis for the advisory group; 2. formal written terms of reference; 3. at least five different areas of expertise represented among core members; 4. at least one meeting per year; 5. circulation of the agenda and background documents at least one week prior to meetings; 6. mandatory disclosure of any conflict of interest

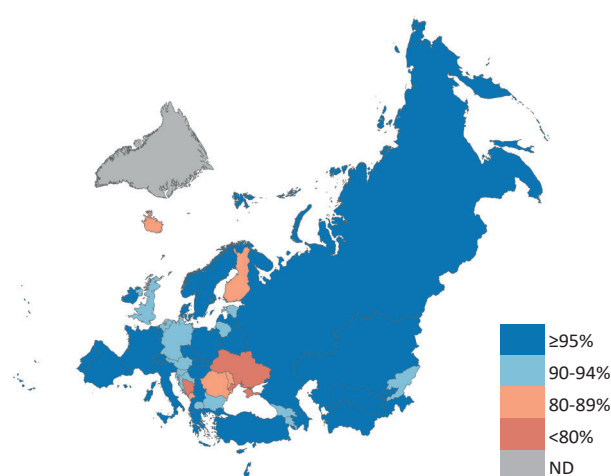


Vaccine coverage estimates, 2013-2017^d

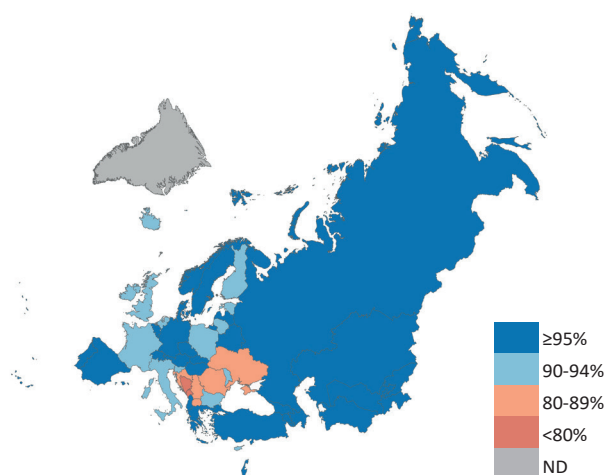
	2013	2014	2015	2016	2017
BCG	94	90	90	92	92
HepB-BD	41	41	41	40	39
DTP1	97	96	96	96	97
DTP3	96	93	93	92	94
HepB3	82	81	82	82	83
Hib3	79	77	76	76	76
Pol3	96	94	94	94	93
PCV3	45	46	48	62	73
Rotac	4	12	23	24	25
RCV1	95	94	94	93	95
MCV1	95	94	94	93	95
MCV2	89	89	89	88	90



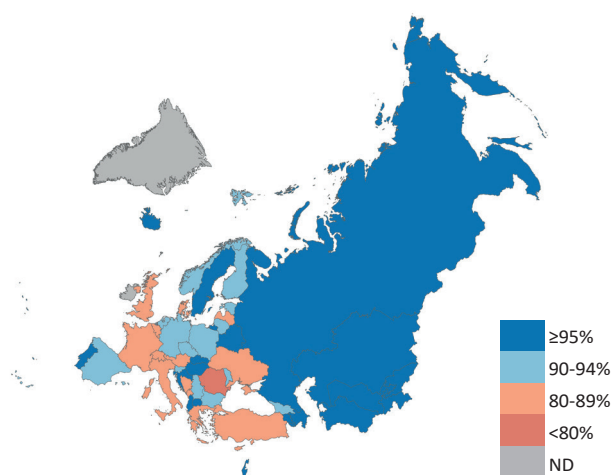
DTP3 estimated coverage by country[†], 2017^d



MCV1 estimated coverage by country[†], 2017^d



MCV2 estimated coverage by country[†], 2017^d

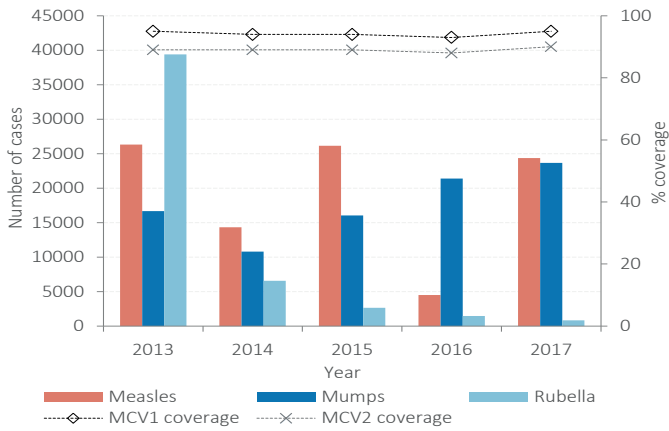


Number of reported cases of vaccine-preventable diseases, 2013-2017^e

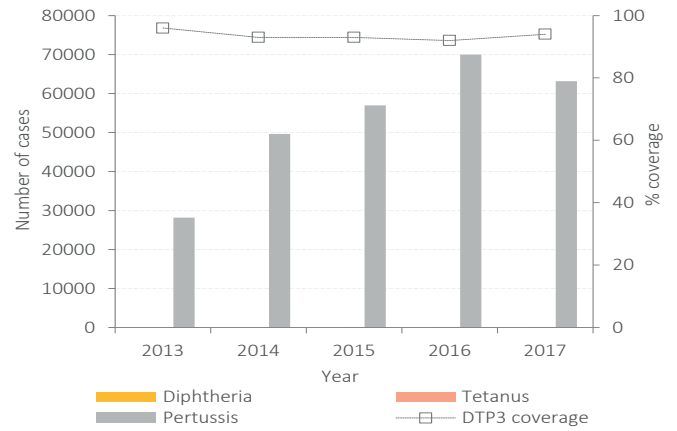
Disease	2013	2014	2015	2016	2017
Measles	26 333 (46)	14 317 (46)	26 136 (49)	4516 (51)	24 351 (53)
Mumps	35 312 (42)	16 662 (38)	16 047 (45)	21 403 (48)	23 660 (49)
Rubella	39 391 (43)	6546 (42)	2662 (46)	1472 (49)	842 (51)
Congenital rubella syndrome	49 (44)	29 (40)	15 (44)	6 (48)	17 (50)
Diphtheria	33 (45)	37 (42)	60 (47)	49 (49)	35 (52)
Tetanus	105 (42)	86 (36)	140 (40)	136 (40)	137 (41)
Pertussis	36 263 (44)	58 978 (44)	63 898 (46)	70 207 (51)	63 242 (53)
Hepatitis A	24 886 (40)	72 882 (42)	59 958 (48)	88 368 (51)	76 557 (51)
Varicella	2 210 989 (35)	1 718 276 (28)	1 618 077 (32)	1 747 177 (36)	1 718 890 (36)

Note: Number of countries reporting ≥0 cases indicated in parentheses

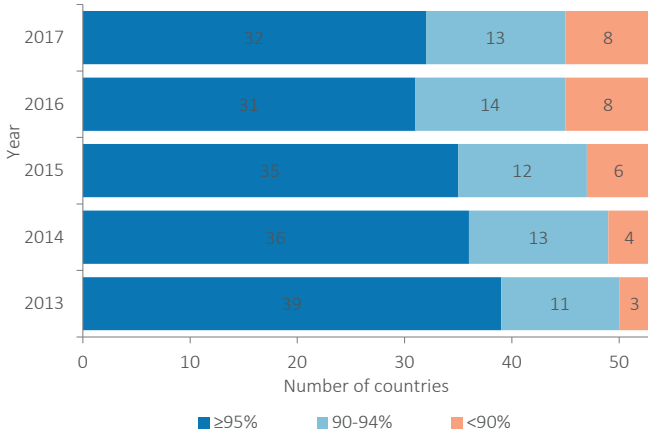
Number of reported measles, mumps and rubella cases^e and MCV coverage estimates^d, 2013-2017



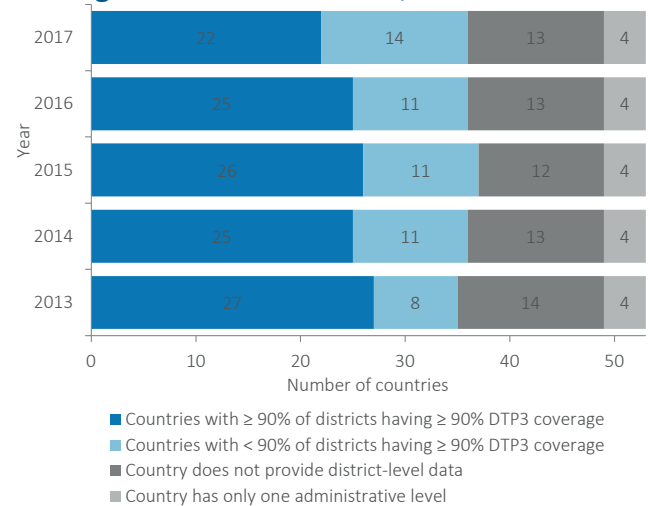
Number of reported diphtheria, tetanus and pertussis cases^e and DTP3 coverage estimates^d, 2013-2017



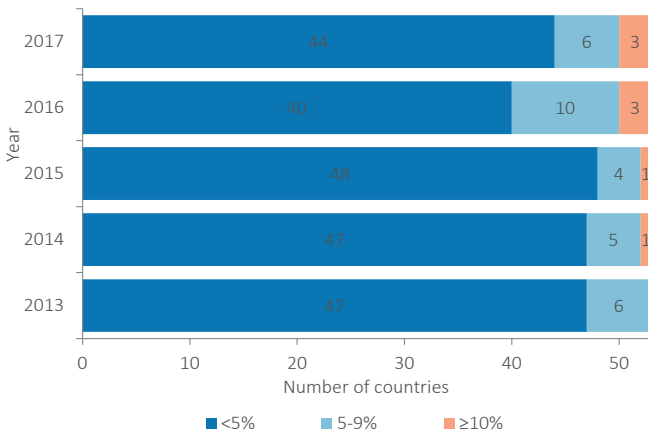
Number of countries by DTP3 coverage estimate^d, 2013-2017



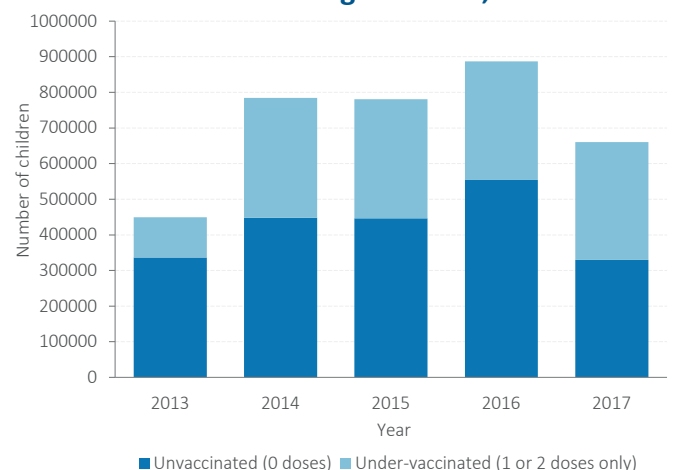
Number of countries with ≥ 90% DTP3 reported coverage in ≥ 90% of districts^e, 2013-2017



Number of countries by DTP1-DTP3 dropout rate^d, 2013-2017



Number of children unvaccinated and undervaccinated with DTP-containing vaccine^{d,f}, 2013-2017



Note: Dropout rate is calculated using WUENIC

Note: Number of un- and undervaccinated children are calculated using WUENIC and World Population Prospects

Number of countries that experienced one or more vaccine stockouts^e, 2013-2017

Vaccine	2013	2014	2015	2016	2017
	N (%)	N (%)	N (%)	N (%)	N (%)
BCG	0 (0)	2 (4)	14 (26)	8 (15)	4 (8)
DTP	1 (2)	7 (13)	13 (25)	10 (19)	11 (21)
HepB	2 (4)	4 (8)	2 (4)	5 (9)	11 (21)
Hib	1 (2)	4 (8)	7 (13)	5 (9)	6 (11)
Pneumo	1 (2)	2 (4)	2 (4)	2 (4)	1 (2)
Rota	0 (0)	1 (2)	1 (2)	1 (2)	0 (0)
OPV	1 (2)	3 (6)	4 (8)	3 (6)	3 (6)
IPV	1 (2)	3 (6)	3 (6)	6 (11)	7 (13)
Measles	1 (2)	0 (0)	3 (6)	4 (8)	6 (11)
HPV	*	*	*	1 (2)	4 (8)
TT	2 (4)	1 (2)	0 (0)	2 (4)	1 (2)

Note: Stockout is at the national and/or subnational level

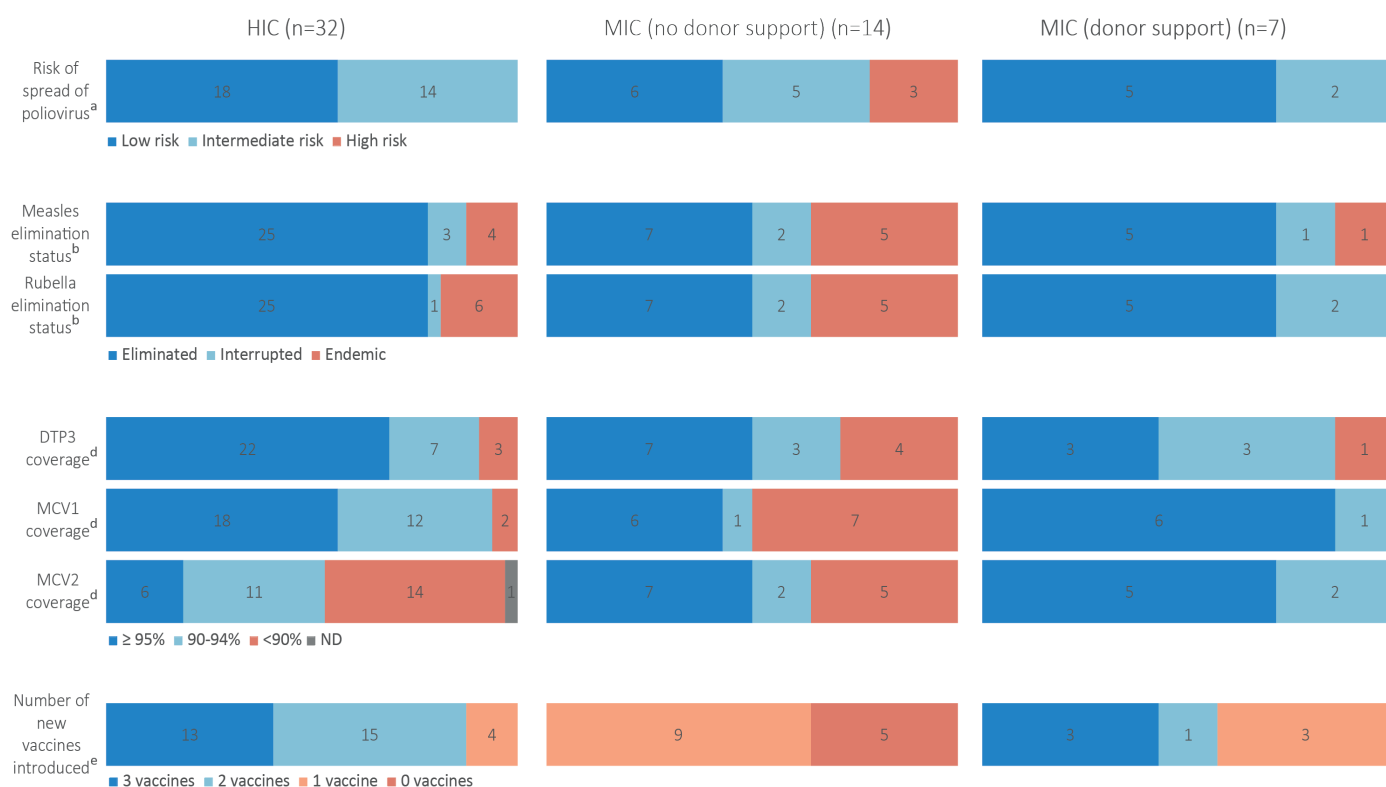
*Data on HPV stockouts have only been collected in JRF since 2016

Number of countries having surveillance with laboratory confirmation of cases, 2017^e

Surveillance of	N (%)
Measles	53 (100)
Rubella	48 (91)
Congenital rubella syndrome	46 (87)
Rotavirus	28 (53)
Invasive meningococcal disease	47 (89)
Invasive pneumococcal disease	43 (81)
Invasive <i>Haemophilus influenzae</i> disease	42 (79)

Note: Case-based surveillance (with laboratory confirmation of cases) assessed for measles, rubella, and congenital rubella syndrome. Hospital-based sentinel surveillance and/or population-based surveillance (both with laboratory confirmation of cases) assessed for rotavirus, invasive meningococcal disease, invasive pneumococcal disease, and invasive *Haemophilus influenzae* disease.

Summary of immunization data by country income categoryⁱ and availability of donor support^c, 2017



Note: New vaccines being assessed are rotavirus vaccine, pneumococcal conjugate vaccine and human papillomavirus vaccine.

Abbreviations

AEFI	Adverse event following immunization	MCV	measles-containing vaccine
BCG	Bacille Calmette-Guerin vaccine for tuberculosis	MCV1	measles-mumps-rubella vaccine, first dose
DTP	diphtheria-tetanus-pertussis-containing vaccine	MCV2	measles-mumps-rubella vaccine, second dose
DTP1	diphtheria-tetanus-pertussis-containing vaccine, first dose	MIC	Middle-income country
DTP3	diphtheria-tetanus-pertussis-containing vaccine, third dose	MMR	measles-mumps-rubella vaccine
HepB	hepatitis B	NITAG	National Immunization Technical Advisory Group
HepB3	hepatitis B vaccine, third dose	OPV	oral polio vaccine
HepB-BD	hepatitis B vaccine, birth dose	PCV	pneumococcal conjugate vaccine
Hib	Haemophilus influenzae type b	PCV3	pneumococcal conjugate vaccine , third dose
Hib3	Haemophilus influenzae type b vaccine, third dose	Pol3	polio-containing vaccine, third dose
HIC	High income country	RCV1	rubella-containing vaccine
HPV	human papillomavirus	Rotac	rotavirus vaccine-complete series
IPV	inactivated polio vaccine	RV	rotavirus vaccine
LIC	Lower-income country	TT	tetanus toxoid vaccine

Data sources

- a European Regional Commission for Certification of Poliomyelitis eradication (RCC) meeting report: www.euro.who.int/32ndRCC;
- b European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/7thRVC;
- c European Vaccine Action Plan 2015-2020 Midterm report
- d WHO/UNICEF Estimates of National Immunization Coverage (WUENIC): (http://www.who.int/immunization/monitoring_surveillance/data/en/)
- e WHO/UNICEF Joint Reporting Form on immunization (JRF)
- f World Population Prospects: The 2017 Revision, New York, United Nations
- g World bank, World Development Indicators
- h Polio Laboratory Network: www.euro.who.int/poliolabnetwork & Personal communication based on annual accreditation process of the European Measles and Rubella Laboratory Network
- i World bank country classification by income level

Map disclaimer

† The boundaries and names shown and the designations used on the maps do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.