

Routine immunization profile

Bulgaria

Progress towards achieving European Vaccine Action Plan goals, 2017

Goal	Indicator	Status	Goal	Indicator	Status
1	Sustain polio-free status ^a (Current risk)	Yes (Intermediate)	4	Meets vaccination coverage targets DTP3 national immunization coverage $\geq 95\%$ ^d $\geq 90\%$ DTP3 coverage achieved in $\geq 90\%$ of districts ^e	No No No
2	Measles elimination status ^b	Eliminated	5	Make evidence-based decisions about introduction of new vaccines* ^e NITAG made a recommendation about PCV NITAG made a recommendation about RV NITAG made a recommendation about HPV	Yes
	Rubella elimination status ^b	Interrupted			Yes Yes Yes
3	Control hepatitis B infection ^c	Validation pending			6

*New vaccines introduced or not introduced based on NITAG evidence-based recommendations

**Country self-sufficient for procuring routine vaccines

Demographic, income and health expenditure summary, 2017

Total Population ^f	7 084 571
Live births	65 596
Surviving infants	65 118
<5 years	320 467
<15 years	1 008 601
Neonatal mortality rate (per 1000 live births) ^f	3.7
Infant mortality rate (per 1000 live births) ^f	6.3
Number of districts ^e	28
GNI (per capita, in USD) ^g	7860
Health spending as % of total government expenditure ^g	10

Immunization schedule, 2017^e

Birth	BCG, HepB_Pediatric
1M	HepB_Pediatric
2M	DTaPHibHepBIPV, DTaPHibIPV, PCV
3M	DTaPHibHepBIPV, DTaPHibIPV, PCV
4M	DTaPHibHepBIPV, DTaPHibIPV, PCV
6M	HepB_Pediatric
7M	BCG
12M	PCV
13M	MMR
16M	DTaPHibIPV
6Y	DTaPIPV
7Y	BCG
11Y	BCG
12Y	MMR, Td
17Y	Td
25Y	Td*

*Repeats every 10 years

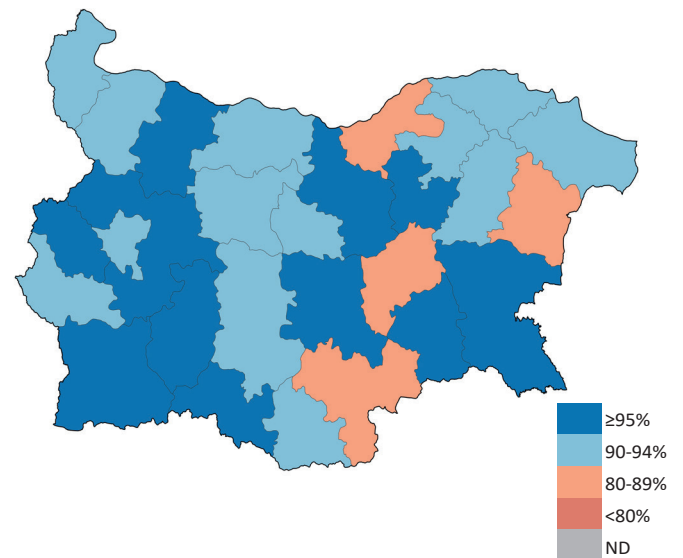


Vaccine coverage estimates, 2013-2017^d

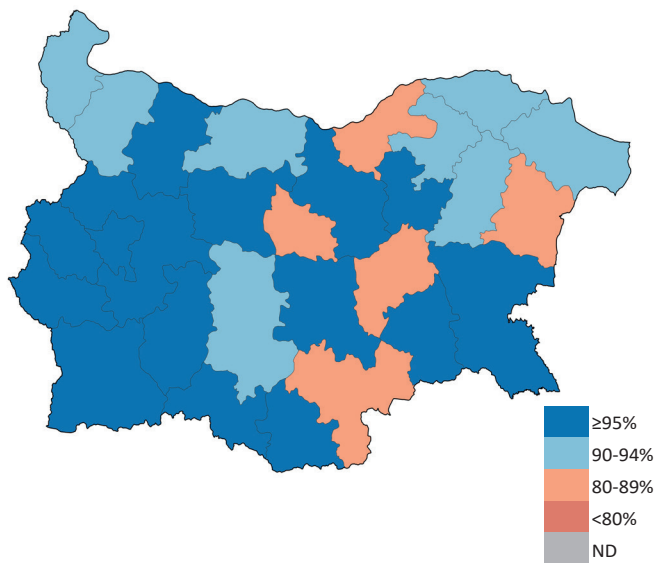
	2013	2014	2015	2016	2017
BCG	97	97	96	96	96
HepB-BD	98	98	97	96	97
DTP1	96	90	93	94	96
DTP3	95	88	91	92	92
HepB3	95	95	92	91	92
Hib3	95	83	87	92	92
Pol3	95	88	91	92	92
PCV3	94	92	90	90	91
Rotac	NR	NR	NR	NR	NR
RCV1	95	93	92	92	94
MCV1	95	93	92	92	94
MCV2	94	89	87	88	92

100 50 0 ND NR

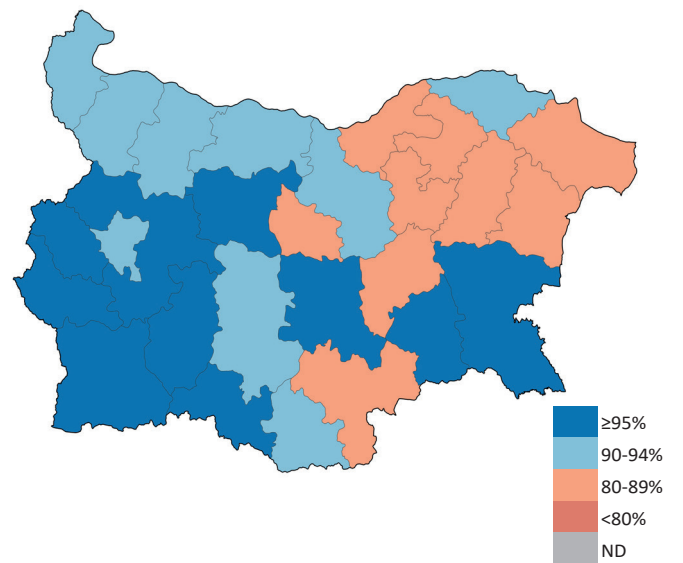
DTP3 reported coverage by subnational area[†], 2017^e



MCV1 reported coverage by subnational area[†], 2017^e



MCV2 reported coverage by subnational area[†], 2017^e



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

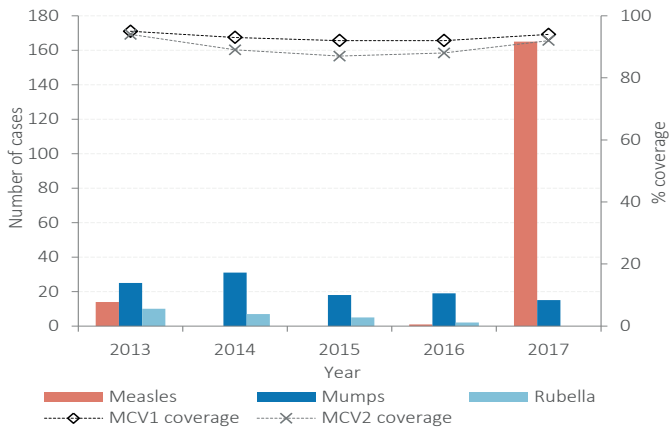
	2013	2014	2015	2016	2017
Measles	14	0	0	1	165
Mumps	25	31	18	19	15
Rubella	10	7	5	2	0
Congenital rubella syndrome	0	0	0	0	0
Diphtheria	0	0	0	0	0
Tetanus	1	0	0	4	0
Pertussis	89	52	35	98	116
Hepatitis A	1825	601	1062	1627	2510
Varicella	38 520	22 844	24 767	32 474	25 007

Surveillance with laboratory confirmation of cases, 2017^e

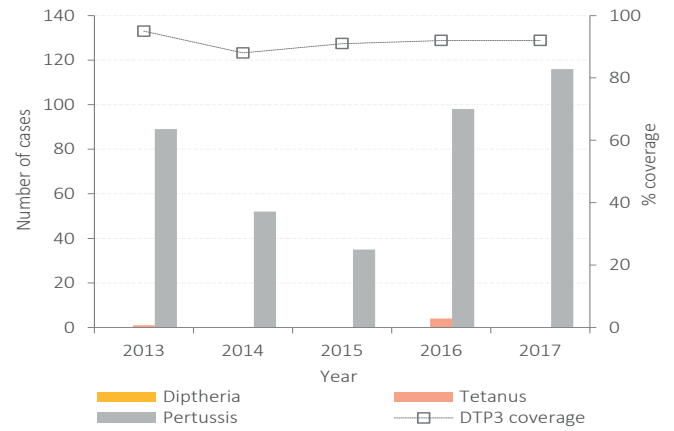
Measles	Yes
Rubella	Yes
Congenital rubella syndrome	Yes
Rotavirus	Yes
Invasive meningococcal disease	Yes
Invasive pneumococcal disease	Yes
Invasive <i>Haemophilus influenzae</i> disease	Yes

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.

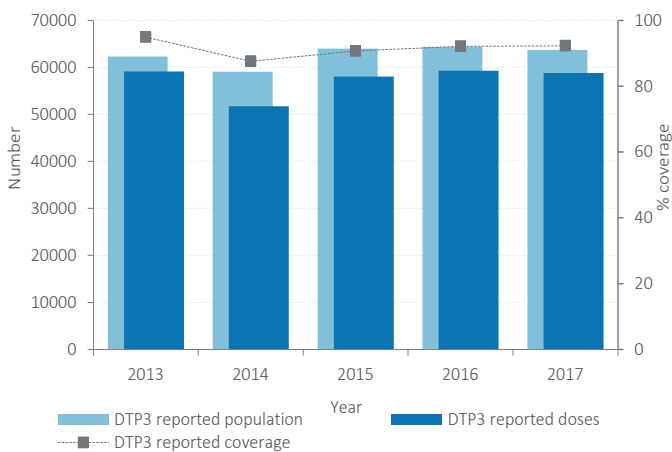
Number of reported measles, mumps and rubella cases^e and MCV coverage estimates^d, 2013-2017



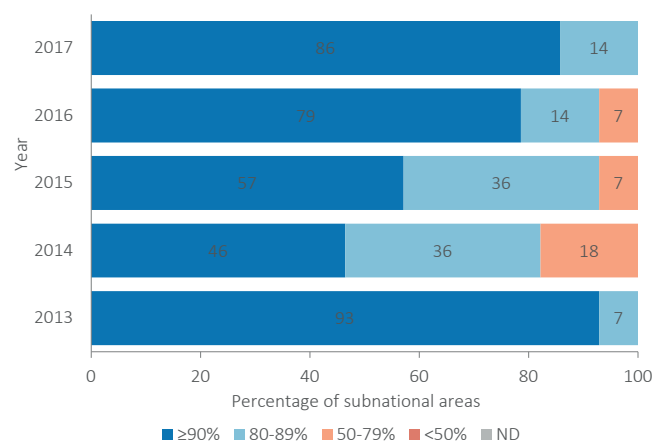
Number of reported diphtheria, tetanus and pertussis cases^e and DTP3 coverage estimates^d, 2013-2017



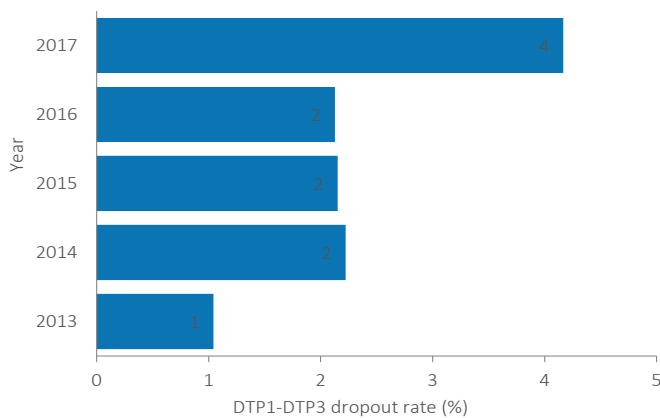
Reported target population, reported number of DTP3 doses administered and DTP3 reported coverage^e, 2013-2017



Percentage of districts by DTP3 reported coverage^e, 2013-2017



DTP1-DTP3 dropout rate, 2013-2017^d



Note: Dropout rate is calculated using WUENIC

Immunization system characteristics, 2017

Sustained access to WHO accredited polio, measles, and rubella laboratories ^h	Yes
NITAG in place that meets six WHO criteria ^e	Yes
National system in place to monitor AEFIs ^e	Yes
Communication plan in place to respond to vaccine safety-related events ^e	No
Vaccine hesitancy assessment performed within last 5 years ^e	No
Mandatory proof of immunization at school entry ^e	No

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 stockouts by administrative level^{e,i}, 2013-2017

	2013	2014	2015	2016	2017
BCG	No	No	No	No	No
DTP	No	Both	Both	No	No
HepB	No	National	No	Both	No
Hib	No	Both	Both	No	No
Pneumo	No	No	No	No	No
Rota	NR	NR	NR	NR	NR
OPV	NR	NR	NR	NR	NR
IPV	No	Both	Both	No	No
Measles	No	No	No	No	No
HPV	*	*	*	NR	NR
TT	No	No	No	No	No

■	No stockout
■	Subnational level stockout only
■	National level stockout only
■	Stockout at both levels
■	NR
■	ND

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

Abbreviations

AEFI	Adverse event following immunization	MCV1	measles-mumps-rubella vaccine, first dose
BCG	Bacille Calmette-Guerin vaccine for tuberculosis	MCV2	measles-mumps-rubella vaccine, second dose
CRS	congenital Rubella Syndrome	MMR	measles-mumps-rubella vaccine
DT	diphtheria-tetanus-containing vaccine	ND	Data not available
DTP	diphtheria-tetanus-pertussis-containing vaccine	NITAG	National Immunization Technical Advisory Group
DTP1	diphtheria-tetanus-pertussis-containing vaccine, first dose	NR	Not relevant as vaccine not included in immunization schedule
DTP3	diphtheria-tetanus-pertussis-containing vaccine, third dose	OPV	oral polio vaccine
GNI	Gross national income	PCV	pneumococcal conjugate vaccine
HepB	hepatitis B	PCV3	pneumococcal conjugate vaccine , third dose
HepB3	hepatitis B vaccine, third dose	Pol3	polio-containing vaccine, third dose
HepB-BD	hepatitis B vaccine, birth dose	RCV1	rubella-containing vaccine, first dose
Hib	Haemophilus influenzae type b	Rotac	rotavirus vaccine-complete series
Hib3	Haemophilus influenzae type b vaccine, third dose	Td	tetanus-diphtheria-containing vaccine
HPV	human papillomavirus	TT	tetanus toxoid vaccine
IPV	inactivated polio vaccine	W,M,Y	Weeks, Months, Years
MCV	measles-containing 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 Communication with the country

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.