# Routine immunization profile **Montenegro**



### **Progress towards achieving European Vaccine Action Plan goals, 2017**

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

 $<sup>\</sup>hbox{*New vaccines introduced or not introduced based on NITAG evidence-based recommendations}$ 

### Demographic, income and health expenditure summary, 2017

Total Population <sup>f</sup>	628 960
Live births	7058
Surviving infants	7037
<5 years	35 780
<15 years	113 952
Neonatal mortality rate (per 1000 live births) <sup>f</sup>	2.3
Infant mortality rate (per 1000 live births) <sup>f</sup>	3.2
Number of districts <sup>e</sup>	23
GNI (per capita, in USD) <sup>g</sup>	7400
Health spending as % of total government expenditure <sup>g</sup>	9

### Immunization schedule, 2017e

Birth	BCG
9W	DTaPHibIPV, HepB_Pediatric
13W	HepB_Pediatric
17W	DTaPHibIPV
23W	DTaPHibIPV
9M	HepB_Pediatric
13M	MMR
1014	
18M	DTaPHibIPV, DTaPIPV, HIB
18IVI	DTaPHibIPV, DTaPIPV, HIB  DT, MMR, OPV



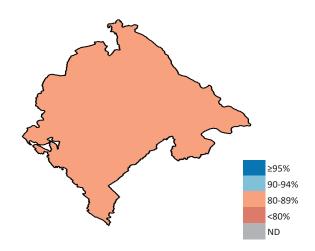
<sup>\*\*</sup>Country self-sufficient for procuring routine vaccines



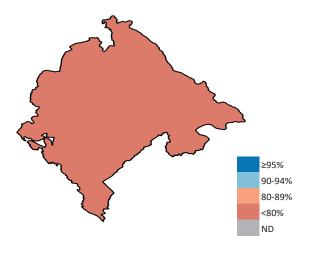
### Vaccine coverage estimates, 2013-2017d

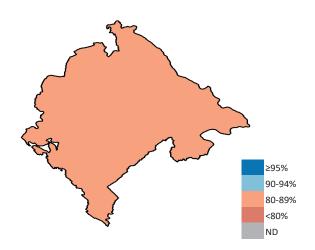
	2013	2014	2015	2016	2017
BCG	93	91	88	85	83
HepB-BD	NR	NR	NR	NR	NR
DTP1	98	97	96	97	95
DTP3	94	91	89	89	87
HepB3	90	87	82	75	73
Hib3	94	91	89	89	87
Pol3	94	91	89	89	87
PCV3	NR	NR	NR	NR	NR
Rotac	NR	NR	NR	NR	NR
RCV1	88	76	64	47	58
MCV1	88	76	64	47	58
MCV2	94	95	94	86	83
	100		50		0 ND NR

### DTP3 reported coverage by subnational area<sup>†</sup>, 2017<sup>e</sup>



### MCV1 reported coverage by subnational area<sup>†</sup>, 2017<sup>e</sup> MCV2 reported coverage by subnational area<sup>†</sup>, 2017<sup>e</sup>





### Number of reported cases of vaccine-preventable diseases, 2013-2017<sup>e</sup>

	2013	2014	2015	2016	2017
Measles	0	ND	ND	0	0
Mumps	48	ND	ND	5	5
Rubella	0	ND	ND	0	0
Congenital rubella syndrome	0	ND	ND	0	0
Diphtheria	0	ND	ND	0	0
Tetanus	0	ND	ND	0	ND
Pertussis	0	ND	ND	8	19
Hepatitis A	3	ND	ND	43	54
Varicella	2979	ND	ND	6057	3348

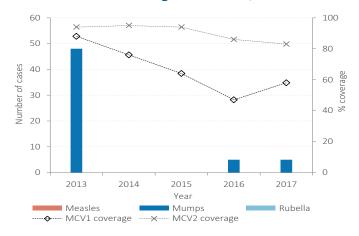
### Surveillance with laboratory confirmation of cases, 2017<sup>e</sup>

Measles	Yes
Rubella	Yes
Congenital rubella syndrome	Yes
Rotavirus	No
Invasive meningococcal disease	Yes
Invasive pneumococcal disease	No
Invasive <i>Haemophilus influenzae</i> disease	Yes

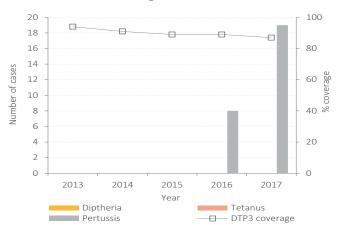
Note: Case-based surveillance (with laboratory confirmation of cases) assessed for measles, rubella, and congenital rubella syndrome. Hospital-based sentinel surveillance and/or population-based surveillance (both with laboratory confirmation of cases) assessed for rotavirus, invasive meningococcal disease,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



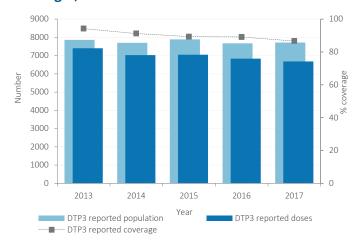
### Number of reported measles, mumps and rubella cases<sup>e</sup> and MCV coverage estimates<sup>d</sup>, 2013-2017



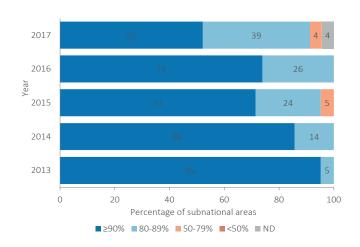
### Number of reported diphtheria, tetanus and pertussis cases<sup>e</sup> and DTP3 coverage estimates<sup>d</sup>, 2013-2017



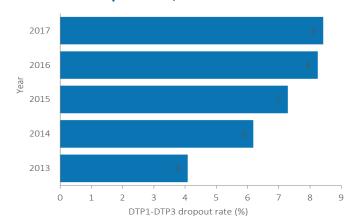
## Reported target population, reported number of DTP3 doses administered and DTP3 reported coverage<sup>e</sup>, 2013-2017



### Percentage of districts by DTP3 reported coverage<sup>e</sup>, 2013-2017



#### DTP1-DTP3 dropout rate, 2013-2017d



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 <sup>e</sup>	Yes
National system in place to monitor AEFIs <sup>e</sup>	Yes
Communication plan in place to respond to vaccine safety-related events <sup>e</sup>	Yes
Vaccine hesitancy assessment performed within last 5 years <sup>e</sup>	No
Mandatory proof of immunization at school entry <sup>e</sup>	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 levele, 2013-2017

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



#### **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	diptheria-tetanus-containing vaccine	ND	Data not available
DTP	diptheria-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
НерВ	hepatitis B	PCV3	pneumococcal conjugate vaccine , third dose
НерВ3	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

#### 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.

<sup>\*</sup>Data on HPV stockouts have only been collected in JRF since 2016