

# Routine immunization profile Kazakhstan

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

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

\*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 <sup>f</sup>	18 204 499
Live births	372 688
Surviving infants	368 375
<5 years	1 970 474
<15 years	5 084 200
Neonatal mortality rate (per 1000 live births) <sup>f</sup>	5.3
Infant mortality rate (per 1000 live births) <sup>f</sup>	8.9
Number of districts <sup>e</sup>	211
GNI (per capita, in USD) <sup>g</sup>	7970
Health spending as % of total government expenditure <sup>g</sup>	11

## Immunization schedule, 2017<sup>e</sup>

Birth	BCG, HepB_Pediatric
2M	DTaPHibHepBIPV, PCV
3M	DTaPHibIPV
4M	DTaPHibHepBIPV, PCV
12-15M	MMR, OPV, PCV
18M	DTaPHibIPV
2Y	HepA_Pediatric
2.5Y	HepA_Pediatric
6Y	BCG, MMR, TdaP
16Y	Td*

\*Repeats every 10 years

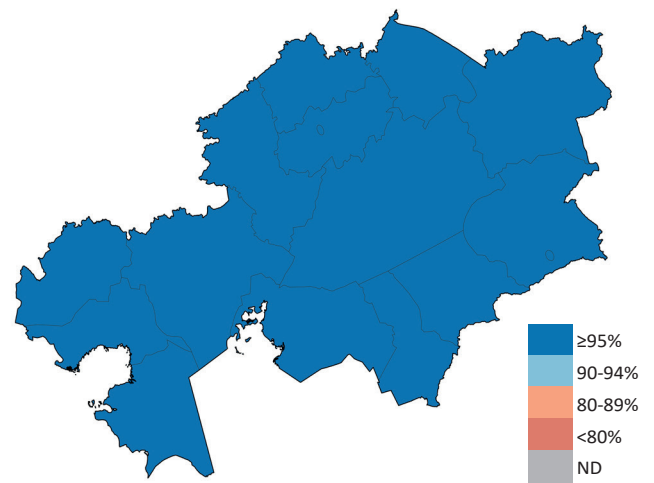


### Vaccine coverage estimates, 2013-2017<sup>d</sup>

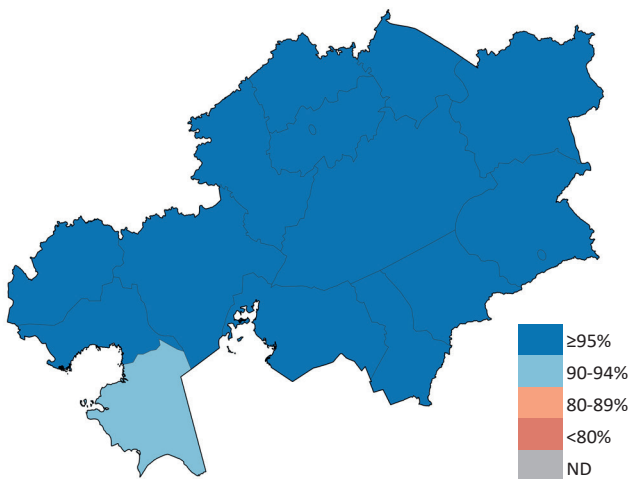
	2013	2014	2015	2016	2017
BCG	95	95	95	95	95
HepB-BD	95	95	95	95	90
DTP1	99	96	99	93	99
DTP3	98	95	98	82	99
HepB3	99	95	98	82	99
Hib3	98	95	98	82	99
Pol3	98	95	98	82	99
PCV3	52	58	74	97	98
Rotac	NR	NR	NR	NR	NR
RCV1	99	99	99	99	99
MCV1	99	99	99	99	99
MCV2	99	99	98	99	99

100 50 0 ND NR

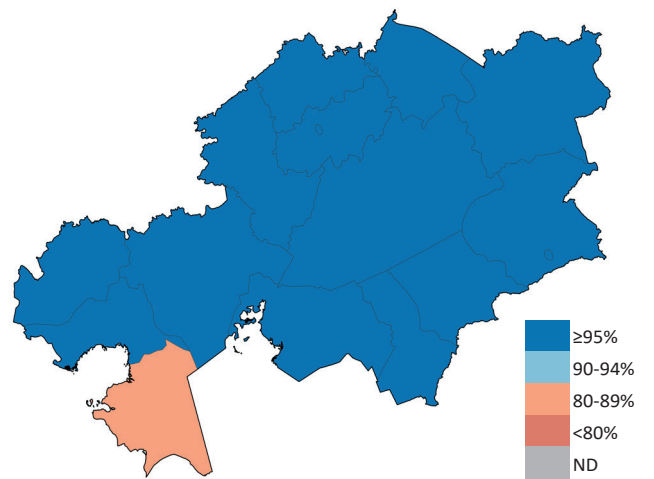
### DTP3 reported coverage by subnational area<sup>†</sup>, 2017<sup>e</sup>



### 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>

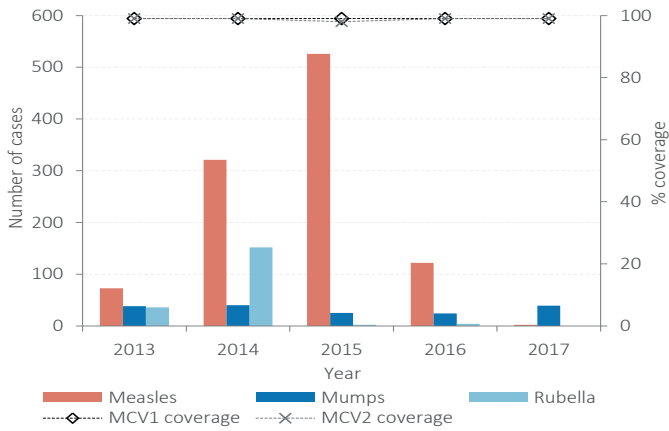
	2013	2014	2015	2016	2017
Measles	73	321	526	122	2
Mumps	38	40	25	24	39
Rubella	36	152	2	4	0
Congenital rubella syndrome	0	0	0	0	0
Diphtheria	0	0	0	0	0
Tetanus	1	1	2	2	3
Pertussis	14	23	74	32	44
Hepatitis A	20	829	358	403	583
Varicella	57 506	62 925	52 350	46 982	50 381

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

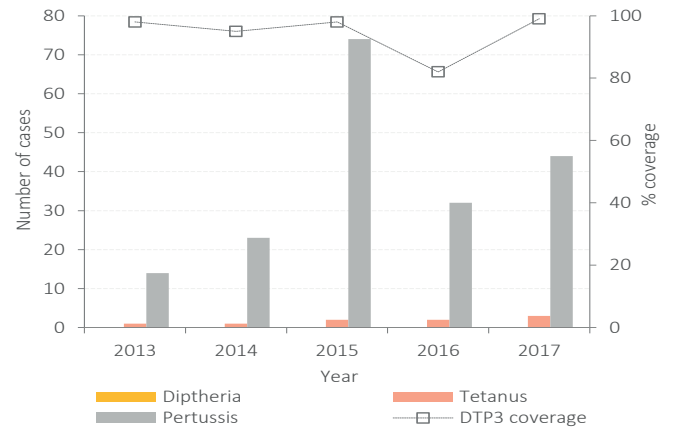
Measles	Yes
Rubella	Yes
Congenital rubella syndrome	Yes
Rotavirus	Yes
Invasive meningococcal disease	Yes
Invasive pneumococcal disease	Yes
Invasive <i>Haemophilus influenzae</i> disease	Yes

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.

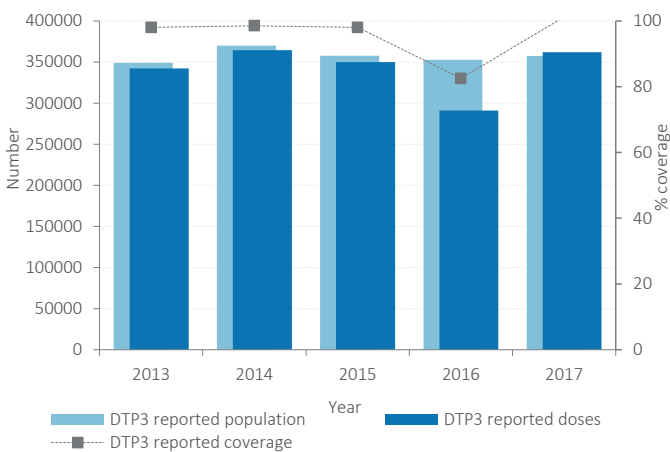
### Number of reported measles, mumps and rubella cases<sup>e</sup> and MCV coverage estimates<sup>d</sup>, 2013-2017



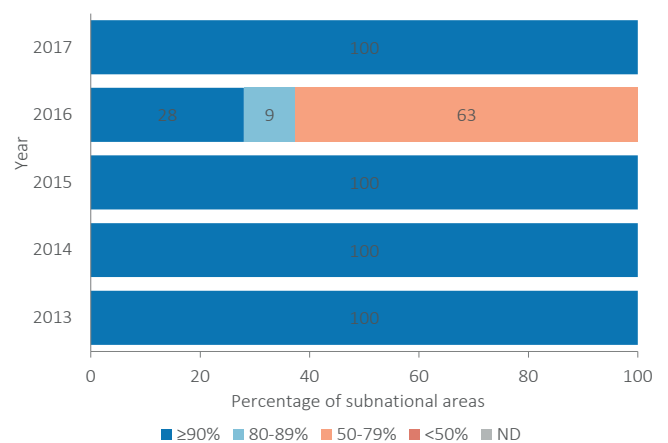
### Number of reported diphtheria, tetanus and pertussis cases<sup>e</sup> and DTP3 coverage estimates<sup>d</sup>, 2013-2017



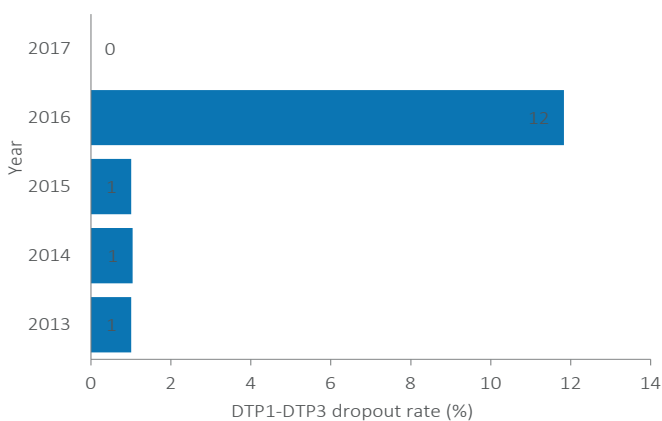
### Reported target population, reported number of DTP3 doses administered and DTP3 reported coverage<sup>e</sup>, 2013-2017



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



### DTP1-DTP3 dropout rate, 2013-2017<sup>d</sup>



Note: Dropout rate is calculated using WUENIC

### Immunization system characteristics, 2017

Sustained access to WHO accredited polio, measles, and rubella laboratories <sup>h</sup>	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 level<sup>a</sup>, 2013-2017

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

<span style="color: blue;">■</span>	No stockout
<span style="color: lightblue;">■</span>	Subnational level stockout only
<span style="color: orange;">■</span>	National level stockout only
<span style="color: red;">■</span>	Stockout at both levels
<span style="color: gray;">■</span>	NR
<span style="color: darkgray;">■</span>	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](http://www.euro.who.int/32ndRCC)
- b European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: [www.euro.who.int/7thRVC](http://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/](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](http://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.