

Routine immunization profile Czech Republic

Progress towards achieving European Vaccine Action Plan goals, 2017

Goal	Indicator	Status	Goal	Indicator	Status
1	Sustain polio-free status ^a (Current risk)	Yes (Low)	4	Meets vaccination coverage targets DTP3 national immunization coverage $\geq 95\%$ ^d $\geq 90\%$ DTP3 coverage achieved in $\geq 90\%$ of districts ^e	No Yes ND
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	Eliminated			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	10 618 303
Live births	107 672
Surviving infants	107 431
<5 years	529 114
<15 years	1 632 467
Neonatal mortality rate (per 1000 live births) ^f	1.7
Infant mortality rate (per 1000 live births) ^f	2.6
Number of districts ^e	86
GNI (per capita, in USD) ^g	17 960
Health spending as % of total government expenditure ^g	14

Immunization schedule, 2017^e

9W	DTaPHibHepBIPV
5M	DTaPHibHepBIPV
11M	DTaPHibHepBIPV
15M	MMR
5Y	DTaP, MMR
10Y	DTaPIPv
13Y	HPV(2x)
25Y	TT

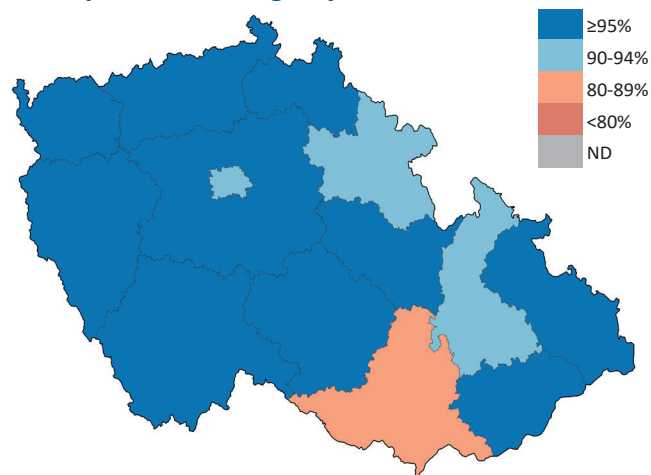


Vaccine coverage estimates, 2013-2017^d

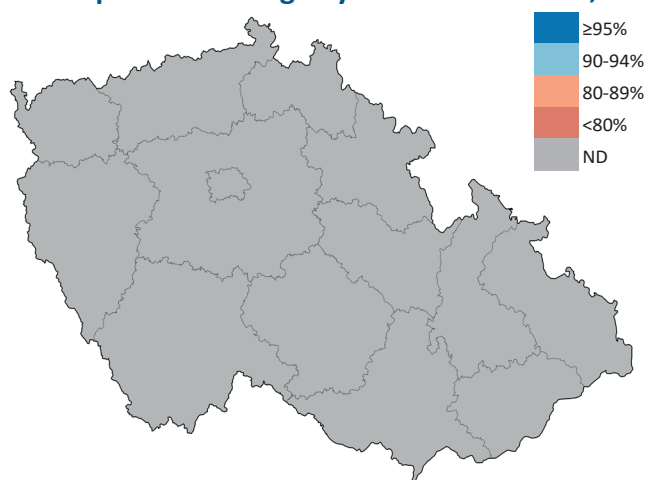
	2013	2014	2015	2016	2017
BCG	NR	NR	NR	NR	NR
HepB-BD	NR	NR	NR	NR	NR
DTP1	99	99	99	98	98
DTP3	98	97	97	96	96
HepB3	99	99	97	96	94
Hib3	99	99	97	96	94
Pol3	99	99	97	96	94
PCV3	NR	NR	NR	NR	NR
Rotac	NR	NR	NR	NR	NR
RCV1	99	99	99	98	97
MCV1	99	99	99	98	97
MCV2	99	96	99	93	90

100 50 0 ND NR

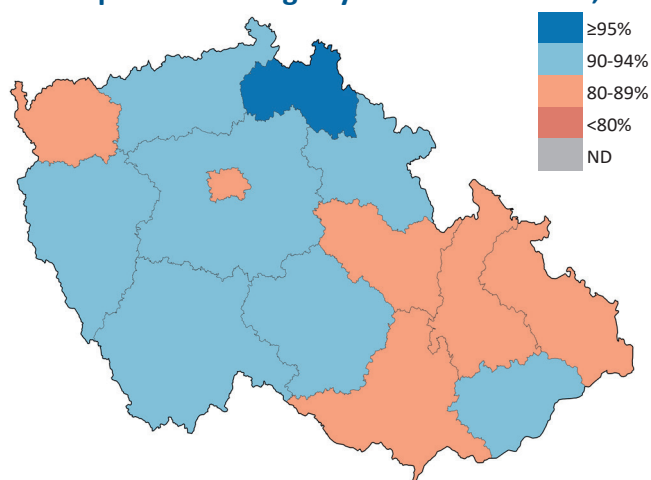
DTP3 reported coverage by subnational area[†], 2017^e



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

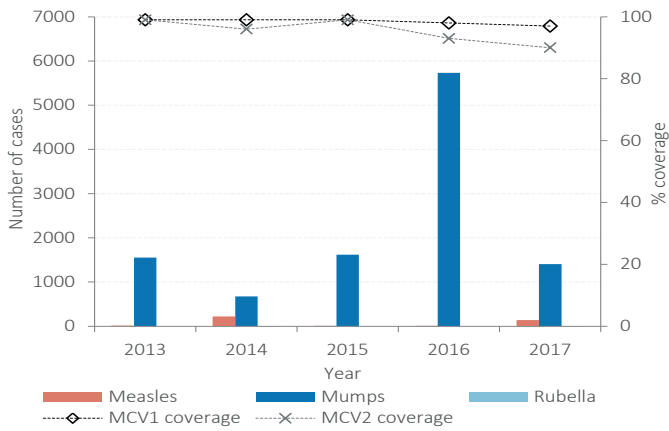
	2013	2014	2015	2016	2017
Measles	15	222	9	7	142
Mumps	1553	677	1616	5734	1407
Rubella	0	1	0	0	2
Congenital rubella syndrome	0	0	0	0	0
Diphtheria	0	0	0	0	0
Tetanus	0	0	1	1	0
Pertussis	1233	2521	585	627	667
Hepatitis A	348	673	724	930	772
Varicella	40 413	51 615	47 051	42 426	39 424

Surveillance with laboratory confirmation of cases, 2017^e

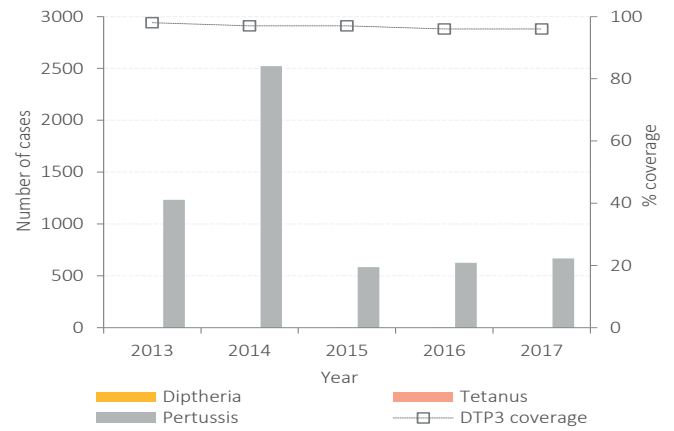
Measles	Yes
Rubella	Yes
Congenital rubella syndrome	Yes
Rotavirus	Yes
Invasive meningococcal disease	Yes
Invasive pneumococcal disease	Yes
Invasive <i>Haemophilus influenzae</i> disease	Yes

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.

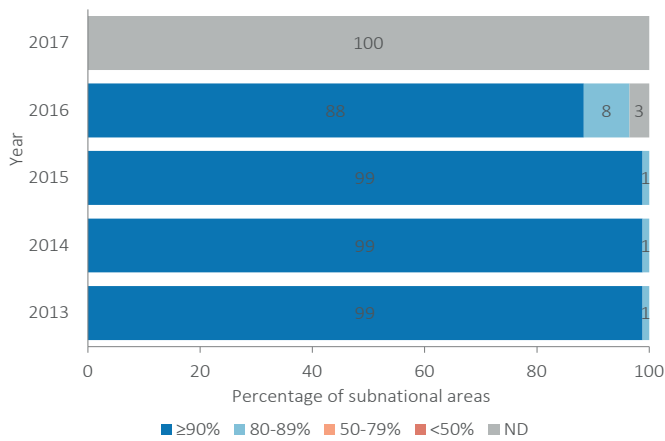
Number of reported measles, mumps and rubella cases^e and MCV coverage estimates^d, 2013-2017



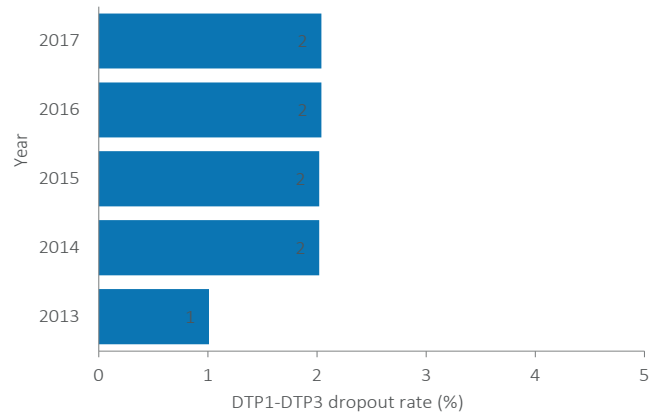
Number of reported diphtheria, tetanus and pertussis cases^e and DTP3 coverage estimates^d, 2013-2017



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	Yes
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^a, 2013-2017

	2013	2014	2015	2016	2017
BCG	NR	NR	National	No	No
DTP	No	No	No	No	No
HepB	No	No	No	No	No
Hib	No	No	No	No	No
Pneumo	NR	NR	NR	NR	NR
Rota	NR	NR	NR	NR	NR
OPV	No	NR	NR	No	No
IPV	No	No	No	No	No
Measles	No	No	No	No	No
HPV	*	*	*	No	No
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	MCV	measles-containing vaccine
BCG	Bacille Calmette-Guerin vaccine for tuberculosis	MCV1	measles-mumps-rubella vaccine, first dose
CRS	congenital Rubella Syndrome	MCV2	measles-mumps-rubella vaccine, second dose
DT	diphtheria-tetanus-containing vaccine	MMR	measles-mumps-rubella vaccine
DTP	diphtheria-tetanus-pertussis-containing vaccine	ND	Data not available
DTP1	diphtheria-tetanus-pertussis-containing vaccine, first dose	NITAG	National Immunization Technical Advisory Group
DTP3	diphtheria-tetanus-pertussis-containing vaccine, third dose	NR	Not relevant as vaccine not included in immunization schedule
GNI	Gross national income	OPV	oral polio 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

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.