# Routine immunization profile **Luxembourg**



#### 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>	Yes Yes ND
	Measles elimination status <sup>b</sup>	Eliminated	_	Make evidence-based decisions about introduction of new vaccines**e	Yes
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	Yes Yes Yes
3	Control hepatitis B infection <sup>c</sup>	Validation pending	6	Achieve financial sustainability of the national immunization programme***	Yes

<sup>\*</sup> Subnational coverage data are not collected; however, no major differences between national and subnational coverage were detected in a 2012 coverage survey

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

Total Population <sup>f</sup>	583 455
Live births	6618
Surviving infants	6598
<5 years	33 137
<15 years	95 938
Neonatal mortality rate (per 1000 live births) <sup>f</sup>	1.7
Infant mortality rate (per 1000 live births) <sup>f</sup>	2.1
Number of districts <sup>e</sup>	0
GNI (per capita, in USD) <sup>g</sup>	70 790
Health spending as % of total government expenditure <sup>g</sup>	12

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

2M	DTaPHibHepBIPV, PCV, Rotavirus
3M	DTaPHibHepBIPV, Rotavirus
4M	DTaPHibIPV, PCV
12M	MMRV, PCV
13M	DTaPHibHepBIPV, MenC_conj
15-23M	MMRV
5-6Y	DTaPIPV
11-13Y	HPV*
15-16Y	DTaPIPV, MenC_conj

<sup>\*</sup>Second dose +6M



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

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



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

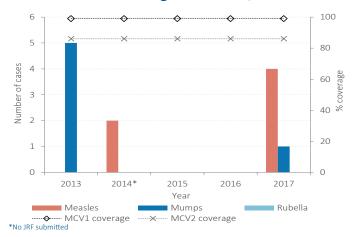
	2013	2014	2015	2016	2017
BCG	NR	NR	NR	NR	NR
HepB-BD	NR	NR	NR	NR	NR
DTP1	99	99	99	99	99
DTP3	99	99	99	99	99
HepB3	94	94	94	94	94
Hib3	99	99	99	99	99
Pol3	99	99	99	99	99
PCV3	95	95	95	95	95
Rotac	89	89	89	89	89
RCV1	99	99	99	99	99
MCV1	99	99	99	99	99
MCV2	86	86	86	86	86
	100		50		0 ND NR

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

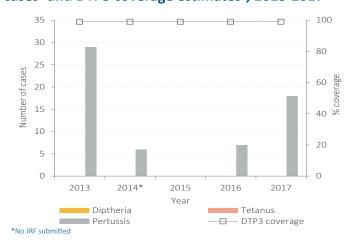
	2013	2014*	2015	2016	2017
Measles	0	2	0	0	4
Mumps	5		0	0	1
Rubella	0	0	0	0	0
Congenital rubella syndrome	0		0	0	0
Diphtheria	0		0	0	0
Tetanus	0		0	0	0
Pertussis	29	6	0	7	18
Hepatitis A	3		5	6	7
Varicella	0		0	ND	0

<sup>\*</sup>No JRF submitted

### 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

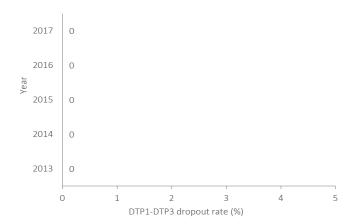


### Surveillance with laboratory confirmation of cases, 2017<sup>e</sup>

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.

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



Note: Dropout rate is calculated using WUENIC

# Routine immunization profile **Luxembourg**



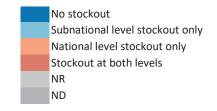
#### Immunization system characteristics, 2017

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>	No
National system in place to monitor AEFIs <sup>e</sup>	ND
Communication plan in place to respond to vaccine safety-related events <sup>e</sup>	ND
Vaccine hesitancy assessment performed within last 5 years <sup>e</sup>	ND
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	No		ND	ND	ND
DTP	No		ND	ND	ND
НерВ	No		ND	ND	ND
Hib	No		ND	ND	ND
Pneumo	No		ND	ND	ND
Rota	No		ND	ND	ND
OPV	NR		NR	NR	NR
IPV	No		ND	ND	ND
Measles	No		ND	ND	ND
HPV	*	*	*	ND	ND
Π	No		ND	ND	ND



#### **Abbreviations**

AEFI	Adverse event following immunization	MCV2	measles-mumps-rubella vaccine, second dose
BCG	Bacille Calmette-Guerin vaccine for tuberculosis	MenC_conj	Meningococcal C conjugate vaccine
CRS	congenital Rubella Syndrome	MMR	measles-mumps-rubella vaccine
DT	diptheria-tetanus-containing vaccine	MMRV	measles-mumps-rubella-varicella vaccine
DTP	diptheria-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
НерВ	hepatitis B	PCV	pneumococcal conjugate vaccine
НерВ3	hepatitis B vaccine, third dose	PCV3	pneumococcal conjugate vaccine , third dose
HepB-BD	hepatitis B vaccine, birth dose	Pol3	polio-containing vaccine, third dose
Hib	Haemophilus influenzae type b	RCV1	rubella-containing vaccine, first dose
Hib3	Haemophilus influenzae type b vaccine, third dose	Rotac	rotavirus vaccine-complete series
HPV	human papillomavirus	Td	tetanus-diphtheria-containing vaccine
IPV	inactivated polio vaccine	TT	tetanus toxoid vaccine
MCV	measles-containing vaccine	W,M,Y	Weeks, Months, Years
MCV1	measles-mumps-rubella vaccine, first dose		

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

<sup>\*\*</sup>No JRF submitted

## Routine immunization profile **Luxembourg**



#### **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.