



**ProVacMed Project**

**Vaccination Programmes in the  
Mediterranean basin and Black Sea  
countries: strategies and coverage**

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# The Network for the control of cross-border health threats in the Mediterranean Basin and Black Sea

Currently the Network is involved in several Projects:

- ❖ **MedPreMIER:** ID Screening in Migrants – (funded by Italian MoH)
- ❖ **ProVacMed:** VPD Strategies and Coverage - (funded by Italian MoH)
- ❖ **MediLabSecure:** VBD lab and integrated surveillance - (funded by EC DGDEVCO)
- ❖ **MediEpiet:** Epi Training - (funded by EC DGDEVCO)

# General objective

To strengthen and share the knowledge on the control of vaccine preventable diseases (VPD), representing potential cross-border health threats, in the Mediterranean Basin and Black Sea

# Specific objectives

- To collect information on immunization strategies, including variability at subnational level
- To collect vaccination coverage data at national and subnational level and in risk groups

# In order to:

- Share knowledge on vaccination strategies and experiences among countries
- Create a network of experts in the field of vaccination

in the Mediterranean basin and Black Sea countries

# Rational

- Increased movement of population
- Outbreaks involving migrant population
- Hard to reach groups with limited access to vaccination
- Civil wars and other events limited access to immunization services in many countries
- Vaccination coverage varies at subnational level

# Available information

Immunization strategies and coverage data of most vaccinations in children

- Collected through the WHO/UNICEF Joint Report Form (JRF) on yearly basis
- Disseminated through the WHO website

Additional information collected through the VENICE network (for the EU/EEA countries)

# Focus on

- Other age groups: adolescents and adults
- Risk groups
- Subnational variability



# The survey

# Methods

- Electronic survey on immunization strategies and coverage
- Participating countries: non-EU countries of the Mediterranean Basin and Black Sea
- Experts working in the field of vaccination
- Excel format

	A	B	C
1	<b>COUNTRY:</b>		
2	Name of the contact person who fills the questionnaire:		
3	Affiliation:		
4	Contact email:		
5	Contact Phone Number:		
7	Name of the head of the unit (if different from the contact person who fills the questionnaire)		
8	Contact email:		
9	Contact Phone Number:		

11 **General questions on vaccination programmes**

12 Is there a National Immunization Plan (NIP) in your country?

13  Yes

14  No

15  Other, specify \_\_\_\_\_

17 If yes, which target groups are included in the NIP?

18  Children

19  Adolescents

20  Adults

21  Risk groups

22  Other, specify \_\_\_\_\_

24 **One sheet for general information**

28 **One sheet for each vaccination**

27 **Source of information used to prefill the questionnaire: WHO/UNICEF website**

28 Immunization strategies (doses and schedule, vaccine type): [http://www.who.int/immunization/monitoring\\_surveillance](http://www.who.int/immunization/monitoring_surveillance)

29 Vaccination coverage - methods of assessment: [http://apps.who.int/immunization\\_monitoring/globalsum](http://apps.who.int/immunization_monitoring/globalsum)

31 Please provide your approval for publishing your country data in the project's report or other scientific publications. Your contribute will be included among the acknowledgments or authors (depending on the rules of the journal)

32  Yes

33  No

# Collected information (1)

## General information:

- Details on the contact person
- Presence of a NIP in your country and age groups covered
- Link to the website reporting country's immunization calendar and coverage
- Approval for data dissemination

# Collected information (2)

Three sections for each vaccine:

**A.** Immunization strategies

**B.** Vaccination coverage by age and risk groups  
(national data)

**C.** Subnational coverage data (limited to  
vaccinations in children)

# Vaccinations explored

- Polio
- Diphtheria, Tetanus
- Pertussis
- Measles, Rubella
- Hepatitis B

# A. Immunization strategies

- Existence of a recommendation and year of introduction
- Difference among subnational territories (in terms of strategies and schedules)
- Doses and schedule
- Type of vaccine
- Payment scheme

by

- Age groups (children, adolescents, adults)
- Risk groups

A. POLIO VACCINATION: VACCINATION STRATEGIES									
		To be filled in only if there is a recommendation for the specific age group							
	1A	2A	3A	4A	5A	6A	7A	8A	
Age groups	Is there a recommendation for polio vaccination in your country for this group?	Year of introduction of recommendation (approximately)	Is the vaccination schedule the same in the whole country or does it vary among subnational territories?	Number of doses by target group	Vaccination schedule: month/year OR range OR interval (e.g. 0-1-6) OR periodicity (e.g. every 10 years)	Type of vaccine/antigen	Payment scheme currently applied to this group	Remarks	
CHILDREN									
ADOLESCENTS - booster or supplementary doses									
Unimmunised ADOLESCENTS									
ADULTS - booster or supplementary doses									
Unimmunised ADULTS									
		To be filled in only if there is a recommendation for the specific risk group							
	1A	3A	4A	5A	6A	7A	8A		
Risk groups	Is there a recommendation for polio vaccination in your country for this group?	Is the vaccination schedule the same in the whole country or does it vary among subnational territories?	Number of doses by target group	Vaccination schedule: month/year OR range OR interval (e.g. 0-1-6) OR periodicity (e.g. every 10 years)	Type of vaccine/antigen	Payment scheme currently applied to this group	Remarks		
Travellers to risk areas									
Newly arrived migrants with undocumented immunization status									
Health care workers who have close contact with patients who might be excreting wild or vaccine type poliovirus									
Laboratory workers handling specimens that may contain poliovirus									
People who come in close contact with those who may be excreting poliovirus (e.g. people working with refugees)									
Other risk groups (describe in "Remarks")									



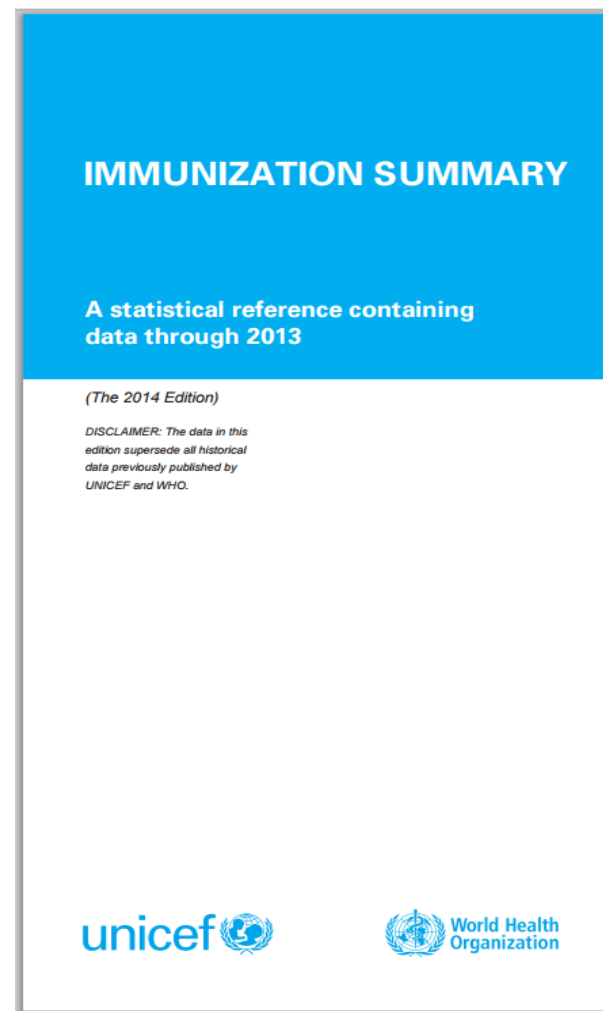
## A. POLIO VACCINATION: VACCINATION STRATEGIES (P)

	1A	2A
<b>Age groups</b>	Is there a <b>recommendation</b> for polio vaccination in your country for this group?	<b>Year of introduction</b> of recommendation (approximate)
<b>CHILDREN</b>		
<b>ADOLESCENTS - booster or supplementary doses</b>	<div style="border: 1px solid black; background-color: #e0e0e0; padding: 5px;"> <p>No</p> <p>Yes, at national level</p> <p>Yes, but only in some subnational territories (describe in "remarks")</p> <p>Other (describe in "remarks")</p> </div>	
<b>Unimmunised ADOLESCENTS</b>		



# Strategies in children

- Prefilled with data published on the WHO website (collected through the WHO/UNICEF JRF)



Payment scheme

Coverage data

Schedule  
Doses  
Type of vaccine

## Italy

2013

Births.....	560,000
Surviving infants.....	558,000
Total population.....	60,990,000
Infant mortality rate (per 1,000 live births).....	3
Under-five mortality rate (per 1,000 live births).....	4
Gross national income per capita (PPP, US\$).....	34,400
Percentage of routine EPI vaccines financed by government.....	...
Home-based vaccination records (percent).....	...

### National coverage rates (%) (WHO/UNICEF estimates, 2013)

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2000	1995	1990	1980
BCG	...	...	...	...	...	...	...	...	...	...	...	0	0
DTP1	99	99	98	98	98	98	99	98	98	95	98	94	0
DTP3	97	97	96	96	96	96	97	96	95	87	95	83	0
HepBB	0	0	0	0	0	0	0	0	0	0	...	...	...
HepB3	97	97	96	96	96	96	97	96	96	94	95	0	...
Hib3	96	96	96	95	96	96	96	96	95	55	0	0	...
rota (last)	0	0	0	0	0	0	0	0	...	...	...	...	...
PcV3	55	55	55	55	55	55	...	...	...	...	...	...	...
Pol3	97	97	96	96	96	96	97	97	97	97	98	98	0
MCV1	90	90	90	91	90	90	90	88	87	74	50	43	0
MCV2	0	0	0	0	0	0	0	0	0	0	...	...	...
PAB	...	...	...	...	...	...	...	...	...	...	...	...	...

### District coverage (as reported)

	2013	2012
Number of districts in country	...	21
Percentage of districts reporting	...	...
DTP3: proportion of districts with coverage (%)	...	0
below 50%	...	0
Between 50-79%	...	0
at 80% or above	...	67
MCV1: proportion of districts with coverage at 95% or above (%)	...	0
DTP1-DTP3 drop-out rate: proportion of districts that have achieved a rate of less than 10% (%)	...	...

### Immunization schedule

DTaP	3, 5-6, 11-13 months; 5-6, 11-18 years	Influenza	>= 65 years
DTaPHepIPV	3, 5-6, 11-13 months	IPV	3, 5-6, 11-13 months; 5-6 years
DTaPHib	3, 5-6, 11-13 months	MenC_conj	13-15 months
DTaPHibHepIPV	3, 5-6, 11-13 months	MMR	13-15 months, 5-6 years
DTaPHibIPV	3, 5-6, 11-13 months	Pneumo_conj	3, 5-6, 11-13 months
DTaPIPV	3, 5-6, 11-13 months; 5-6 years	Td	11-18 years
HepB	3, 5-6, 11-13 months	Tdap	11-18 years
Hib	3, 5-6, 11-13 months	TT	3, 5-6, 11-13 months; 5-6, 11-18 years
HPV	12 years; +1-2, +6 months	Varicella	13-15 months; 5-6 years

# B. Vaccination coverage

- Existence of a mechanism to monitor coverage
- Estimated vaccination coverage (%)
- Year
- Numerator and denominator
- Method of assessment (details)
- Frequency of data collection

By

- Age groups
- Risk groups (estimated target population size)

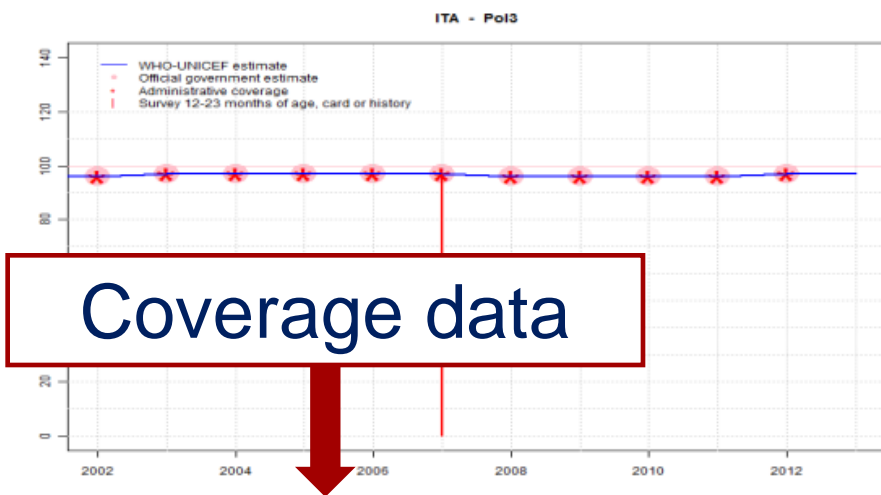




# National coverage in children

Prefilled with data published on the WHO website (JRF)

Italy - Pol3



Coverage data

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	96	97	97	97	97	97	96	96	96	96	97	97
Estimate GoC	••	••	••	••	•	••	••	••	••	••	••	•
Official	96	97	97	97	97	96	96	96	96	96	97	NA
Administrative	96	97	97	97	97	97	96	96	96	96	97	NA
Survey	NA	NA	NA	NA	NA	96.8	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (vuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

Description:

- 2002: Estimate based on coverage reported by national government. Polio vaccination is mandatory. GoC=R+
- 2003: Estimate based on coverage reported by national government. GoC=R+
- 2004: Estimate based on coverage reported by national government. GoC=R+
- 2005: Estimate based on coverage reported by national government. GoC=R+ S+
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+
- 2010: Estimate based on coverage reported by national government. GoC=R+
- 2011: Estimate based on coverage reported by national government. GoC=R+
- 2012: Estimate based on coverage reported by national government. Data are provisional and based on reports from 14 out of 21 districts. GoC=R+
- 2013: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Method of assessment



# C. Subnational coverage data

- Number of subnational territories in the country (national is the first) and population size
- Estimated coverage (%)
- Year
- Numerator and denominator
- Method of assessment (details)
- Frequency of data collection  
by subnational territory

Limited to «children» age group



# Working groups

- Share the questionnaire (Polio vaccination as an example)
- Take confidence with information to be collected and data sources
- Integration and amendments to the survey
- Identification of Contact Points
- No need to deliver the questionnaires!!!

# Next steps

- Finalize the questionnaire
- Data collection
- Data Analysis
- Preliminary Report
- Data validation
- Final Report

# Expected results

- Final report with aggregated data
- Country profiles with information on immunization strategies and coverage

## A. POLIO VACCINATION: VACCINATION STRATEGIES (Printable draft)

To be filled in only if there is a recommendation for the specific age group						
1A	2A	3A	4A	5A	6A	7A

## B. POLIO VACCINATION: VACCINATION COVERAGE - NATIONAL DATA (Printable draft)

To be filled in only if vaccination coverage is monitored in the specific age group
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## C. POLIO VACCINATION - SUBNATIONAL VACCINATION COVERAGE DATA (PAEDIATRIC VACCINATIONS) (Printable draft)

Number of subnational territories - as the 2nd administrative level (national is the first):	
Total population of the country in 2014	

1C. Regarding vaccination in children, could you provide coverage data at subnational level for polio vaccination?	
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	2C	3C	4C	5C	6C	7C	8C	9C	10C
Name of the subnational territory	Population size of each subnational territory in 2014	% of total population size <i>(automatically calculated)</i>	YEAR (specify the most recent year for which you can provide consolidate coverage data)	Pol 3 (3 doses of polio vaccine by 12 months) coverage estimate (%)	Alternative coverage estimate (%) <u>if 5C IS NOT APPLICABLE</u>	Description of the numerator (example: number of children at 24 mo vaccinated with 3 doses, ...)	Description of the denominator (example: surviving infants, newborns, children at 24 months....)	Method of assessment of vaccination coverage	Frequency of coverage assessment
		#DIV/0!							
		#DIV/0!							
		#DIV/0!							
		#DIV/0!							
		#DIV/0!							
		#DIV/0!							
		#DIV/0!							
		#DIV/0!							
..... (Add rows if needed)		#DIV/0!							

Remarks (in the computerized version of the questionnaire a field for remarks will be available for each row):

A  
C  
A  
A  
R  
  
R  
C  
I  
I  
T  
N  
I  
R  
H  
W  
V  
L  
I  
P  
W  
A  
N  
C  
I  
G  
R  
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O  
R

## OPTIONS for QUESTIONS - Printable draft

Questionnaires were pre-filled with information obtained from the following pages of the WHO/UNICEF website:

Immunization strategies (doses and schedule, vaccine type/antigen, funding): [http://www.who.int/immunization/monitoring\\_surveillance/Immunization\\_Summary\\_2013.pdf?ua=1](http://www.who.int/immunization/monitoring_surveillance/Immunization_Summary_2013.pdf?ua=1)

Vaccination coverage (coverage data, method of assessment): [http://apps.who.int/immunization\\_monitoring/globalsummary/wucoveragecountrylist.html](http://apps.who.int/immunization_monitoring/globalsummary/wucoveragecountrylist.html)

### SHEET A. POLIO VACCINATION: VACCINATION STRATEGIES

1A. Is there a recommendation for polio vaccination in your country for this group?	3A. Is the vaccination schedule the same in the whole country or does it vary among subnational territories?	6A. Type of vaccine/ antigen	7A. Payment scheme currently applied to this group
No	It is the same in the whole country	IPV	Fully funded by government
Yes, at national level	It varies among subnational territories (describe in "remarks")	mOPV1 (OPV1 monovalent)	Partially funded by government
Yes, but only in some subnational territories (describe in "remarks")	Other (describe in "remarks")	mOPV2 (OPV2 monovalent)	Fully paid by recipients
Other (describe in "remarks")		mOPV3 (OPV3 monovalent)	Varies among subnational territories (describe in "remarks")
		bOPV (bivalent)	Other (describe in "remarks")
		tOPV (trivalent)	
		OPV (details unknown)	
		Other (describe in "remarks")	

5A. Vaccination schedule: month/year OR range OR interval (e.g. 0-1-6) OR periodicity (e.g. every 10 years)	Some examples: <b>Children:</b> 2, 4, 6 months; 2, 6 years - <b>Adolescents:</b> if a booster is planned at 14 years, report "14 years" in the box "Adolescents-booster or supplementary doses"; if a booster is planned at 12-14 years, enter the range "12-14 years" in the box "Adolescents- booster or supplementary doses"; if vaccination is also recommended for unimmunised adolescents, enter the schedule with interval between doses in the box "Unimmunised adolescents" e.g.: 0, +1, 6/12 months - <b>Adults:</b> if a booster is planned every 10 years, enter the periodicity in the box "Adults-booster or supplementary doses" e.g.: every 10 years; if vaccination is also recommended for unimmunised adults, report the schedule with interval between doses in the box "Unimmunised adults" e.g.: 0, +1, +6/12 months
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### SHEET B. POLIO VACCINATION: VACCINATION COVERAGE - NATIONAL DATA

1B. Is polio vaccination coverage monitored for this group in your country?	7B. Method of assessment of vaccination coverage	8B. Frequency of coverage assessment	From 3B to 9B
Yes, at national level	Administrative reports	Once a year	For <b>children</b> , we ask you to report coverage for 3 doses of polio vaccination at 12 months of age. If this data is not available, we ask you to report coverage as measured in your country (" <b>Alternative vaccination coverage</b> ") and specify the <b>numerator</b> (for example, children vaccinated with 4 doses) and the <b>denominator</b> (children at which age?). For all age groups (children, adolescents and adults) and for the risk groups, we ask you to specify numerator and denominator and give a short description of the <b>method of assessment of coverage</b> . Please, include any data source available for determining immunization coverage, e.g. results from rapid coverage monitoring or seroprevalence studies when applicable. For published studies/reports, include the references.
Yes, at national and sub-national level	Survey	Every 2 years	
No	Ad hoc study	Every 5 years	
	Other (describe in "remarks")	Irregularly	
		Other (specify in "remarks")	

### SHEET C. POLIO VACCINATION: SUBNATIONAL VACCINATION COVERAGE (paediatric vaccination)

1C. Regarding vaccination in children, could you provide coverage data at subnational level for polio vaccination?	9C. Method of assessment of vaccination coverage	10C. Frequency of coverage assessment
Yes	Administrative reports	Once a year
No, data are collected only at national level	Survey	Every 2 years
No, data are collected at subnational level but they are not available	Ad hoc study	Every 5 years
	Other (describe in "remarks")	Irregularly
		Other (specify in "remarks")

# Working groups' participants

## Cristina:

- Iria Preza
- Kojic Dusan
- Itamar Grotto
- Moh'd Bassam Qasem
- Carmen Montano-Remacha

## Christian:

- Arijana Kalaveshi
- Luljeta Gashi
- Zeina Farah
- Ahmed Elgrari
- Silvia Stratulat
- Tanya Melillo

## Maria Grazia:

- Blagoja Aleksoski
- Milena Vasic
- Latifa Maazaoui
- Iryna Rudenko
- Georgios Anastopoulos





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