



Immunization surveillance, assessment and monitoring

Monitoring immunization systems and safety

Assessing diseases burden and immunization impact

Vaccine preventable diseases

Data statistics and graphics

Guidelines tools and publications

[Country selection form](#)



Last update: 16 December 2008
Next overall update: July 2009

Immunization Profile - the Republic of Yemen



Development status: <small>Least developed</small>	GNI / capita (US\$): ¹	760	Infant (under 12 months) mortality rate: ^{2§}	60
	GDP / capita (US\$): ¹	2'264	Child (under 5 years) mortality rate: ^{2§}	80

Population data in thousands ²

	2007	2006	2005	2004	2003	2000	1990	1980
Total population	22'389	21'732	21'096	20'478	19'877	18'182	12'314	8'381
Live births	860	839	819	800	783	743	641	474
Surviving infants	809	788	767	747	729	688	578	407
Pop. less than 5 years	3'740	3'639	3'551	3'478	3'417	3'278	2'625	1'768
Pop. less than 15 years	10'071	9'871	9'678	9'493	9'314	8'774	6'375	4'257
Female 15-49 years	5'168	4'977	4'790	4'608	4'430	3'938	2'550	1'777

Number of reported cases

[\(Click for full incidence time series from 1980 for the Republic of Yemen\)](#)

<u>Diphtheria</u>	10	36	8	2	-	-	-	555
<u>Japanese encephalitis</u>	-	-	-	-	-	-	-	-
<u>Measles</u>	13	8'079	6'285	12'708	8'536	-	-	18'020
<u>Mumps</u>	5'059	6'295	3'165	-	-	-	-	-
<u>Pertussis</u>	2'760	3'476	1'294	2'200	-	-	-	15'332
<u>Polio *</u>	0	1	478	0	0	0	-	722
<u>Rubella</u>	165	302	230	-	-	-	-	-
<u>Rubella (CRS)</u>	-	-	-	-	-	-	-	-
<u>Tetanus (neonatal)</u>	48	101	46	50	84	174	-	7
<u>Tetanus (total)</u>	48	101	46	-	-	-	-	405
<u>Yellow fever</u>	-	-	-	-	-	-	-	-

* Polio refers to all polio cases (indigenous or imported), including polio cases caused by vaccine derived polio viruses (VDPV); it does not include cases of vaccine-associated paralytic polio (VAPP) and cases of non polio acute flaccid paralysis [AFP].

Percent of target population vaccinated, by antigen

Hovering over an antigen reveals its fuller definition

[Last coverage survey ³](#)

[Official country estimates ⁴](#)

[\(Click for full official coverage time series from 1980 for the Republic of Yemen\)](#)

	Year	Result									
<u>BCG</u>	1996	54	DHS	64	70	66	63	67	82	99*	9
<u>DTP1</u>	1996	54	DHS	94	92	99*	92	81	-	-	-

12/22/2008

WHO vaccine-preventable diseases: ...

DTP3	1996	40	DHS	87	85	86	78	66	76	89	1
HepB1 (birth dose)	-	-	-	-	-	-	-	-	-	-	-
HepB3	-	-	-	87	85	86	49	42	15	-	-
Hib3	-	-	-	87	85	57	-	-	-	-	-
JapEnc	-	-	-	-	-	-	-	-	-	-	-
MCV	1996	43	DHS	74	80	76	76	66	71	74	2
MCV2	-	-	-	38	30	25	-	-	-	-	-
Pol3	1996	46	DHS	87	85	87	78	66	76	89	1
TT2plus	1996	9	DHS	17	20	24	21	31	31	15	-
VAD1	-	-	-	61	47	30	93	-	-	-	-
YFV	-	-	-	-	-	-	-	-	-	-	-

WHO-UNICEF coverage estimates.⁵

(Click for full WHO-UNICEF coverage estimates time series from 1980 for the Republic of Yemen)

BCG				64	70	66	63	67	82	95	9
DTP1				94	92	99	92	81	91	94	18
DTP3				87	85	86	78	66	76	84	1
HepB3				87	85	86	49	42	15	-	-
Hib3				87	85	57	-	-	-	-	-
MCV				74	80	76	76	66	71	69	2
PAB				52	56	59	69	65	54	17	0
Pol3				87	85	87	78	66	76	84	1

Number of districts in the country	333	Proportion of districts reporting DTP3 coverage:	Greater or equal to 90%	44
			From 80 to 89%	29
			From 50 to 79%	23
			Lesser than 50%	4
% of coverage reports received at national level vs number of reports expected	-	Proportion of districts not reporting DTP3 coverage	0	

Immunization Schedule (2007 or latest available)

Hovering over an antigen reveals its fuller definition

Vaccine	Schedule	Vaccine	Schedule
BCG	birth;	OPV	birth; 6, 10, 14 weeks;
DTwPHibHep	6, 10, 14 weeks;	TT	1st contact pregnancy; +1, +6 months; +1, +1 year;
Measles	9, 18 months;	VitaminA	9, 15 months;

Immunization indicators

Indicator	Expected answer	2007	2006	2005	2004	2003	2002
Planning and management							
<i>Multi-year plan (MYP) for immunization</i>	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
<i>What years does the MYP cover?</i>	number	2006-2010	2006-2010				
<i>Is MYP costing included?</i>	Yes/No/NA	Yes	Yes				

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WHO vaccine-preventable diseases: ...

<i>Broad health sector integration of MYP for immunization?</i>	Yes/No/NA	Yes	Yes				
<i>Was there an annual work plan for immunization services?</i>	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
<i>If yes, was costing included</i>	Yes/No	Yes	Yes				
<i>% of districts with microplans to raise immunization coverage</i>	From 0 to 100%	100	100	96	57	53	8
<i>Year of last inventory of all refrigeration equipment assigned for public immunization services.</i>	number	2007	2005				
<i>Year last vaccine management assessment conducted.</i>	number	2003	2003				

System performance

<i>Total number of districts in country</i>	number	333	333	333	332	332	324
<i>% districts had >=90% DTP3 coverage</i>	From 0 to 100%	44	30	42	30	16	
<i>% districts had 80-89% DTP3 coverage</i>	From 0 to 100%	29	28	15	14	8	
<i>% districts had >=80% DTP3 coverage</i>	From 0 to 100%	73	59	57	45	24	24
<i>% districts had 50-79% DTP3 coverage</i>	From 0 to 100%	23	36	29	39	39	40
<i>% districts had <50% DTP3 coverage</i>	From 0 to 100%	4	6	14	16	37	25
<i>% districts not reporting DTP3</i>	From 0 to 100%	0	0	0	1	-0.5	35
<i>% districts had >=90% MCV1 coverage</i>	From 0 to 100%	8	12	27	28	18	11
<i>% districts had 80-89% MCV1 coverage</i>	From 0 to 100%	23	9	11	12		
<i>% districts had 50-79% MCV1 coverage</i>	From 0 to 100%	59	54	39	43	43	
<i>% districts had <50% MCV1 coverage</i>	From 0 to 100%	10	25	23	17	31	
<i>% districts not reporting MCV1</i>	From 0 to 100%	0	0	0	0	8	
<i>% districts had >=90% TT2+ (pw) coverage</i>	From 0 to 100%	1	2	2	2	3	
<i>% districts had 80-89% TT2+ (pw) coverage</i>	From 0 to 100%	1	0				
<i>% districts had 50-79% TT2+ (pw) coverage</i>	From 0 to 100%	2	5	9	5	13	
<i>% districts had <50% TT2+ (pw) coverage</i>	From 0 to 100%	96	92	88	93	82	
<i>% districts not reporting TT2plus</i>	From 0 to 100%	0	1	10	5	2	
<i>% of districts had > 10% drop-out rates</i>	From 0 to 100%	36	38	70	63	72	
<i>% of districts with at least one supervisory visit of all health facilities</i>	From 0 to 100%	96	96	96	100	15	100
<i>National % wastage for Hib</i>	From 0 to 100%	9		7	NA		NA
<i>National % wastage for MCV</i>	From 0 to 100%	24	20				
<i>Drop-out rate between DTP1 and DTP3 coverage</i>	From 0 to 100%	7	8	14	15	19	-7.8
<i>% point difference between HepB3 and DTP3 coverage</i>	From 0 to 100%	0	0	0	29	24	35
<i>% of coverage report received at national level vs number of reports expected</i>	From 0 to 100%	96	98	96	94		

Surveillance

<i>Is there a national case-based measles surveillance system in place?</i>	Yes/No/NA	Yes	Yes				
<i>If yes are specimens taken to confirm diagnosis?</i>	Yes/No/NA	Yes	Yes				
<i>System with lab. confirmation measuring impact of vaccination against invasive bacterial diseases?</i>	Yes/No/NA	Yes	Yes				

Vaccine supply

<i>Was there any district with vaccine supply interruption?</i>	Yes/No	No	No	No	Yes		0
<i>% of districts supplied with sufficient</i>	From 0 to 100%	100	100	100	100	100	100

number of AD syringes

From 0 to 100% 100 100 100 100 100 100

Safety

<i>Activity workplan for immunization injection safety</i>	Yes/No/NA	Yes	Yes	Yes	Yes	Yes	
<i>Activity workplan for waste management</i>	Yes/No	Yes	Yes	Yes	Yes		
<i>Type of injection equipment Ad syringes</i>	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
<i>Type of injection equipment non AD disposables</i>	Yes/No	No	No			No	
<i>Type of injection equipment Sterilizables</i>	Yes/No	No	No			No	
<i>Are safety boxes distributed with all vaccine deliveries</i>	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
<i>Monitoring of adverse events following immunization</i>	Yes/No	No	No	No	No	No	No
<i>How many were reported?</i>	number		NA			0	
<i>How many were categorized as "serious" adverse events</i>	number		NA				
<i>National policy regarding disposal: Incineration</i>	Yes/No	Yes	Yes	Yes		Yes	Yes
<i>National policy regarding disposal: Open burning</i>	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
<i>National policy regarding disposal: Burial</i>	Yes/No	Yes	Yes			Yes	Yes
<i>National policy regarding disposal: Other</i>	Yes/No					No	
<i>National policy regarding disposal: No policy</i>	Yes/No					No	

Finance

<i>Line item in national budget for vaccines</i>	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes
<i>Percentage of routine vaccines funded by Government</i>	From 0 to 100%	31	100	13	100	75	
<i>Line item in national budget for injection supply</i>	Yes/No	Yes	Yes	Yes	No	No	Yes
<i>Immunization spend. Financed using Government funds?</i>	From 0 to 100%	80	80	70	79	100	100

New and under utilized vaccines introduction

<i>Hepatitis B vaccine integrated in routine immunization schedule</i>	Yes/Yes [A]/Yes [P]/No	Yes	Yes	Yes	Yes	Yes	Yes
<i>Hib vaccine integrated in routine immunization schedule?</i>	Yes/Yes [P]/No	Yes	Yes	Yes	No	No	No
<i>Mumps vaccine integrated in routine immunization schedule</i>	Yes/No	No	No	No	No	No	No
<i>Pneumococcal vaccine integrated in routine immunization schedule</i>	Yes/No	No					
<i>Rotavirus vaccine integrated in routine immunization schedule</i>	Yes/No	No					
<i>Rubella vaccine integrated in routine immunization schedule</i>	Yes/No	No	No	No	No	No	No

Maternal and neonatal tetanus (NT) elimination

<i>NT eliminated</i>	Yes/No	Yes	No	No	No	No	No
<i>Protection at birth (PAB) against neonatal tetanus</i>	From 0 to 100%						

Polio eradication

12/22/2008

WHO vaccine-preventable diseases: ...

<i>Confirmed polio</i>	number	0	1	478	0	0	0
<i>Non-polio AFP rate</i>	number	3.8	2.7	4.6	1.6	1.1	1.8
<i>% adequate specimen</i>	From 0 to 100%	92	85	78	82	90	83

Vitamin A

<i>Vitamin A deficiency status</i>	Subclinical (SC); Clinical (C); Possibility of VAD (NDP); VAD unlikely (NDU)	C	C	C	C	C	C
<i>Were Vitamin A supplements distributed with routine services?</i>	Yes/No	Yes	Yes	Yes	Yes	Yes	No
<i>Were Vitamin A supplements integrated with campaigns?</i>	Yes/No	Yes	Yes	Yes	Yes	No	Yes

Measles mortality reduction

<i>Measles adequate second opportunity</i>	Yes/No	Yes	Yes	Yes	Yes	No	No
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Yellow Fever

<i>Member states at risk for Yellow Fever</i>	Yes/No	No	No	No	No	No	No
<i>Yellow Fever in schedule</i>	Yes/High risk/Partial/No	No	No	No	No	No	No

Unless otherwise specified, data provided by Member States through WHO-UNICEF Joint Reporting Form and WHO Regional offices.

¹Source: "The 2008 World Bank Development Indicators Online", GDP per capita is PPP adjusted.

²Source: "World Population Prospects: The 2006 Revision", New York, United Nations, 2007.

³Source: UNICEF/WHO survey database.

⁴Source: If no official estimate is available, the administrative coverage is reported. * indicates coverage over 99.5%.

⁵Source: WHO-UNICEF estimates.