

Immunization system highlights

- A standing national technical advisory group on immunization (NTAGI) with formal written terms of reference exists.
- There is a comprehensive multi-year plan (cMYP) for immunization covering 2011-2015.
- 7% spending on vaccines financed by the government.
- 48% spending on routine immunization financed by the government.
- A national policy for health care waste management including waste from immunization activities exists.
- All districts have $\geq 80\%$ coverage for DTP-HepB3, $\geq 90\%$ coverage for MCV1 and $\geq 80\%$ coverage for TT2+ in pregnant women.
- No district reported more than 10% drop-out rate from DTP1 to DTP3.
- A coverage evaluation survey (CES) is planned in the next 24 months.
- Vaccine wastage rates 2013: BCG=75%, DTP-HepB-Hib=15%, OPV=15%, MCV=30% and TT=20%.
- A national system to monitor adverse events following immunization (AEFI) exists.
- Plan to introduce IPV in 2015.

Table 1: Basic information¹ 2013

Total population	25,811,259	Division/Province/State/Region	12
Live births (LB)	352,691	District	209
Children <1 year	348,270	Population density (per sq km)	202
Children <5 years	1,706,321	Population living in urban areas	60%
Children <15 years	5,863,949	Population using improved drinking-water sources	98%
Pregnant women	356,541	Population using improved sanitation	82%
Women of child bearing age (15-49 years)	6,918,612	Total expenditure on health as % of GDP	-
Neonatal mortality rate	16 (per 1000 LB)	Births attended by skilled health personnel	100%
Infant mortality rate	23 (per 1000 LB)	Neonates protected at birth against NT	93%
Under-five mortality rate	29 (per 1000 LB)		
Maternal mortality ratio	87 (per 100000 LB)		

¹ SEAR annual EPI reporting form, 2013 and WHO, World Health Statistics, 2014

Table 2: Immunization schedule, 2013

Vaccine	Age of administration
BCG	At birth
HepB	At birth
DTP-Hib-HepB	6 weeks, 10 weeks, 14 weeks
OPV	6 weeks, 10 weeks, 14 weeks
Measles	9 months and 15 months
TT	Pregnant women (3 months and 4 months of pregnancy)
Vitamin A	6-59 months

Source: WHO/UNICEF joint reporting form (JRF) 2013

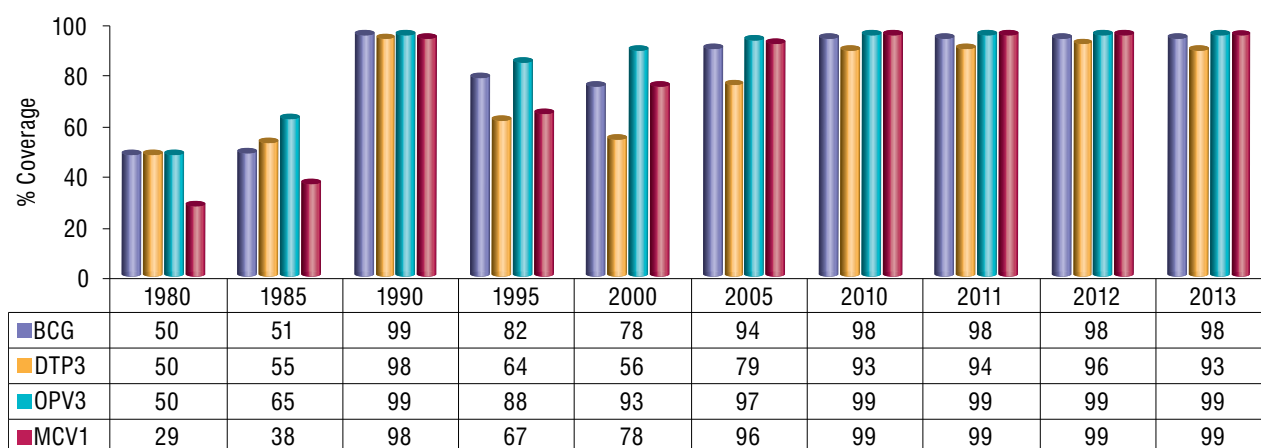
EPI history

- Vaccine production unit was set up in 1946.
- EPI launched in 1980.
- Hepatitis B introduced in 2003.
- AD syringes introduced in 2003.
- Hepatitis B birth dose introduced in 2004.
- DTP-HepB introduced in 2006.
- MCV2 introduced in 2008.
- Hib Pentavalent (DTP-Hib-HepB) introduced in 2012.

Source: cMYP 2011-2015

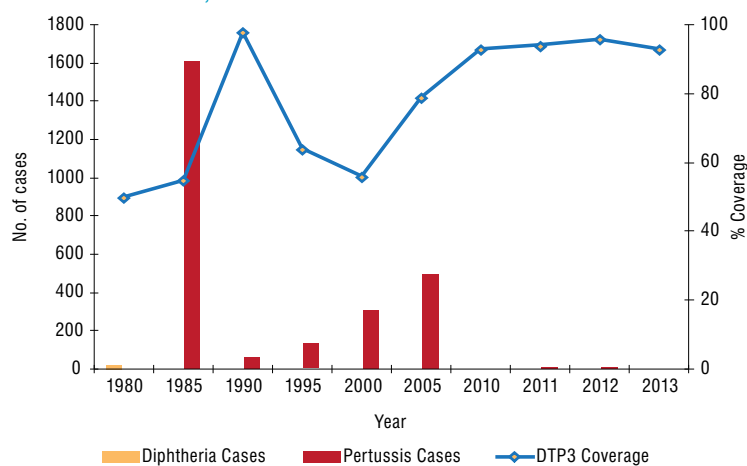
Disclaimer: The boundaries and names shown and the designations used on all the maps do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Figure 1: National immunization coverage, 1980-2013



WHO/UNICEF coverage estimates 2013 revision (July 2014)

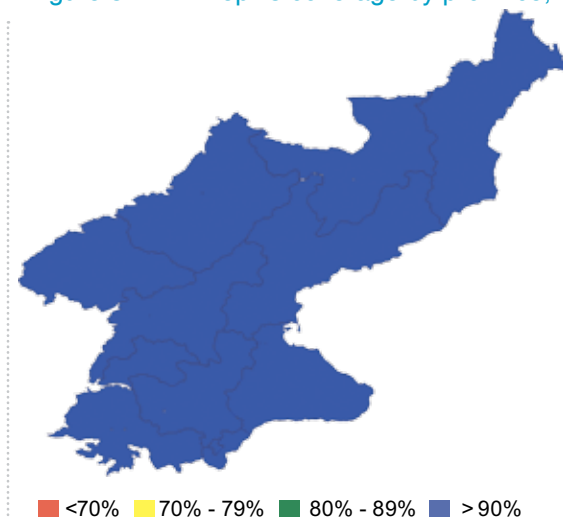
Figure 2: DTP3 coverage¹, diphtheria and pertussis cases², 1980-2013



¹ WHO/UNICEF coverage estimates 2013 revision (July 2014)

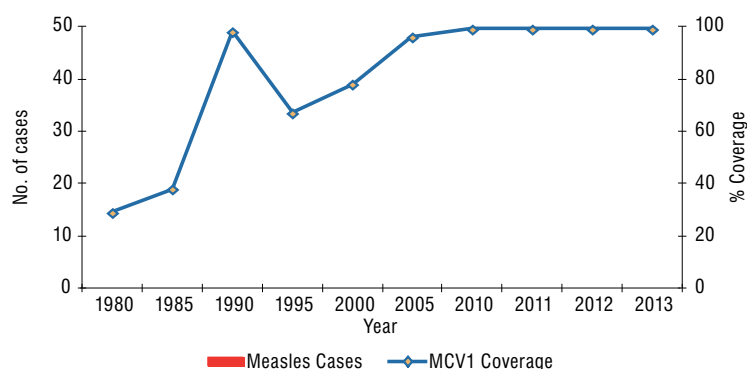
² WHO vaccine-preventable diseases: monitoring system 2013 global summary

Figure 3: DTP-HepB3 coverage by province, 2013



Source: SEAR annual EPI reporting form, 2013 (administrative data)

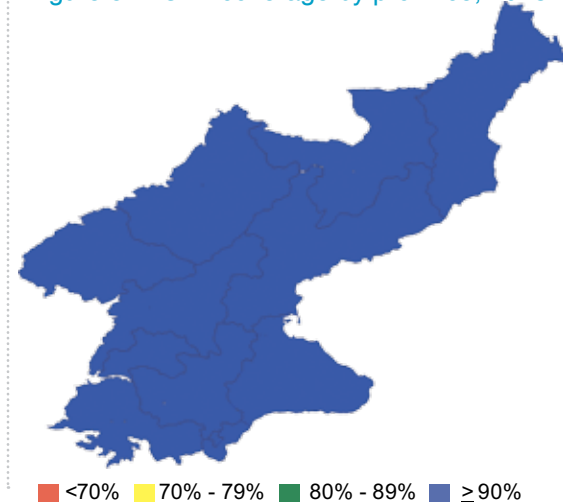
Figure 4: MCV1 coverage¹ and measles cases², 1980-2013



¹ WHO/UNICEF coverage estimates 2013 revision (July 2014)

² WHO vaccine-preventable diseases: monitoring system 2013 global summary

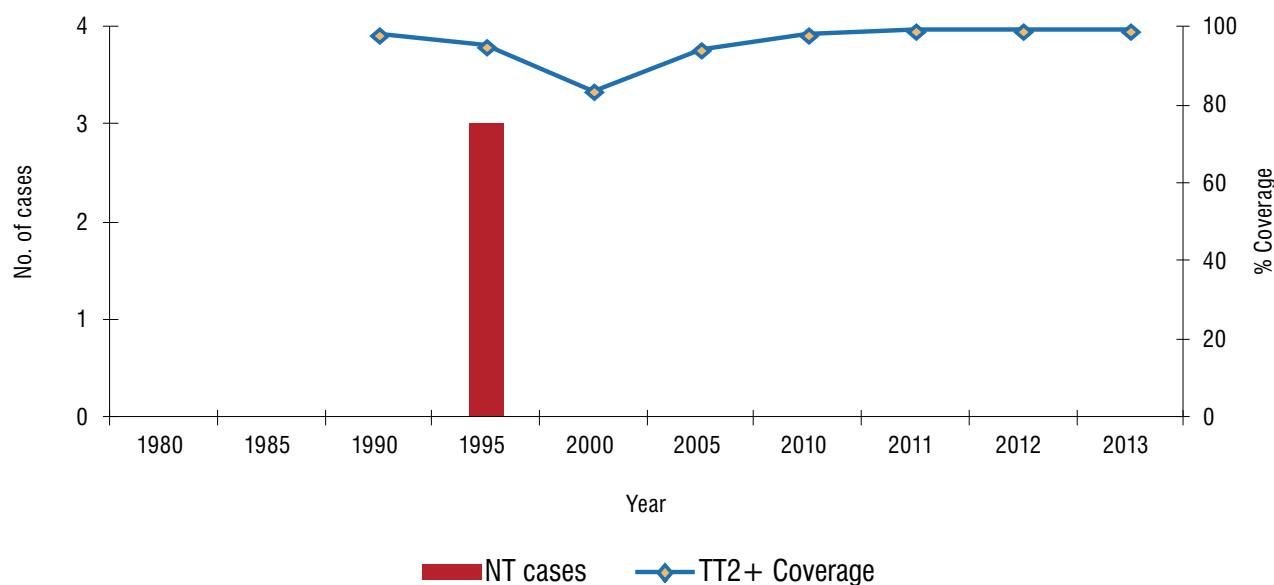
Figure 5: MCV1 coverage by province, 2013



Source: SEAR annual EPI reporting form, 2013 (administrative data)

Figure 6: TT2+ coverage¹ and NT cases², 1980-2013

- DPR Korea achieved the status of maternal and neonatal tetanus (MNT) elimination before 2000.



¹ Country official estimates, 1980-2013

² WHO vaccine-preventable diseases: monitoring system 2014 global summary

Table 3: Supplementary immunization activities (SIA)

Year	Antigen	Activity	Target population (age)	Date of 1 st round	Date of 2 nd round	1 st round coverage (%)	2 nd round coverage (%)
2000	OPV	NID	2,147,929 (<5 yrs)	Oct-00	Nov-00	99.6	99.7
2001	OPV	NID	2,120,380 (<5 yrs)	Oct-01	Nov-01	98.8	99.5
2002	OPV	NID	2,098,940 (<5 yrs)	Oct-02	Nov-02	99.7	99.8
2007	Measles	National	6,102,733 (6M to 15 yrs) 10,020,643 (16 to 45 yrs)	Mar-07	-	99.91	-
2009-2010	JE	Sub-national	1.5 million (12 to 23 months and 4 to 6 yrs)	Jul-09 Jul-10	-	99.5	-

Source: WHO/UNICEF JRF

Figure 7: Laboratory network

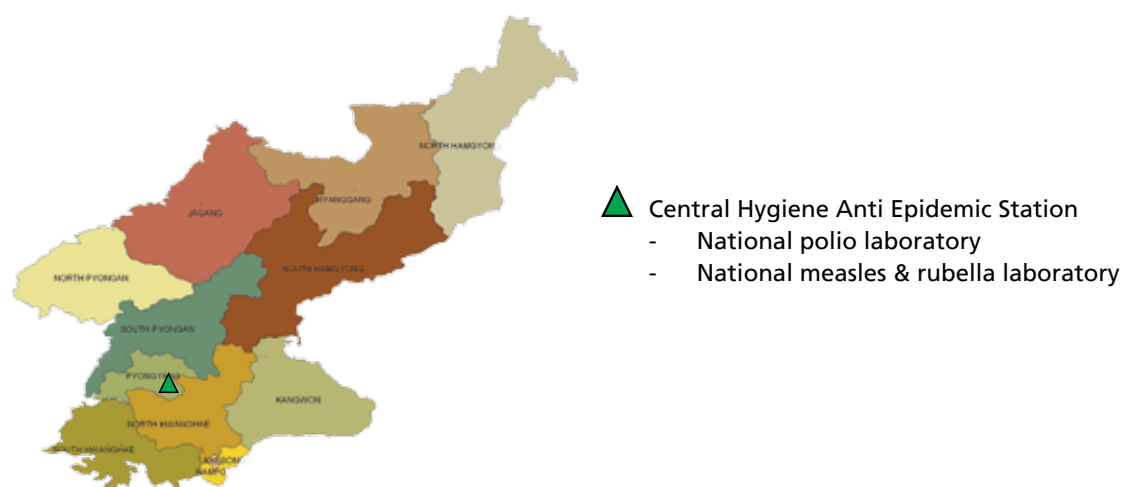


Table 4: AFP surveillance performance indicators, 2004-2013

- The last laboratory confirmed polio case was reported in 1996.

Indicator	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
AFP cases	72	85	113	125	138	112	112	129	125	116
Wild poliovirus confirmed cases	0	0	0	0	0	0	0	0	0	0
Compatible cases	0	0	0	0	0	0	0	0	0	0
AFP rate	1.07	1.27	1.86	1.95	2.15	1.95	1.95	2.25	2.18	2.02
Non-polio AFP rate ¹	1.07	1.27	1.86	1.95	2.15	1.95	1.95	2.25	2.18	2.02
Adequate stool specimen collection percentage ²	94%	96%	99%	100%	100%	100%	99%	100%	100%	100%
Total stool samples collected	141	172	237	258	280	220	245	270	269	226
% NPEV	13	15	12	17	10	9	13	10	11	9
% Timeliness of primary result reported ³	94	95	88	91	97	90	97	99	94	92

Data as of 31 July 2014

¹ Number of discarded AFP cases per 100,000 children under 15 years of age.² Percent with 2 specimens 24 hours apart and within 14 days of paralysis onset.³ 2004 to 2007 result reported within 28 days and 2008 onwards result reported within 14 days of sample received at laboratory.

Figure 8: Non-polio AFP rate by province, 2013

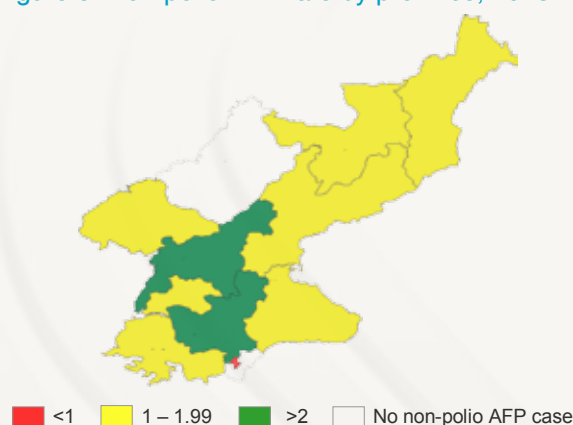


Figure 9: Adequate stool specimen collection percentage, 2013

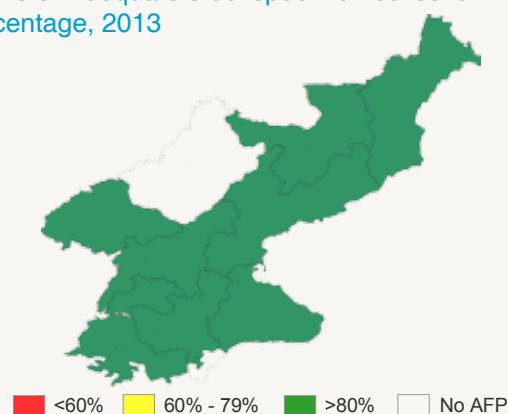


Table 5: Reported cases of vaccine preventable diseases, 2004-2013

Year	Polio	Diphtheria	Pertussis	Neonatal Tetanus (% of all Tetanus)	Measles	Rubella	Mumps	Japanese Encephalitis	Congenital Rubella Syndrome
2004	0	0	1,930	0	0	507	2,050	ND	0
2005	0	0	493	0	0	123	187	ND	0
2006	0	0	409	0	0	101	176	0	0
2007	0	0	1,250	0	3,550	101	176	0	0
2008	0	0	395	0	82	82	67	124	0
2009	0	0	8	0	0	0	18	10	ND
2010	0	0	0	0	0	0	0	ND	ND
2011	0	0	13	0	0	5	66	0	0
2012	0	0	8	0	0	1	11	0	0
2013	0	0	0	0	0	0	0	0	0

Source: WHO/UNICEF JRF

ND=No data

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