Afghanistan

Total number of states \ provinces: 32

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	83%	Pol3	83%
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Non Polio AFP Profile

Percent 0-dose (national) 1%	Percent states with < 10% 0-dose NPAFP children Non-adjusted 100% (20 of 20) % within acceptable range 100% (20 of 20)			
Percent 4+ doses (national)	Percent states with > 80% 4+dose	e NPAFP children		
94%	Non-adjusted 90% (18 of 20)	% within acceptable range	90% (18 of 20)	

Independent Monitoring

		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house

Independent monitoring data were used to assess the country specific Major Process Indicator. Please refer to the Risk Assessment document, annex-5, for details.

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	15	11	4	4	23-May-10
W1W3	1	1			28-Dec-09
W3	22	10	8	6	11-Apr-10
cVDPV2	1	1	1	1	10-Jun-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
8.7	Non-adjusted 100% (31 of 31)	% within acceptable range	100% (31 of 31)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
92.4%	Non-adjusted 97% (29 of 30)	% within acceptable range	100% (30 of 30)	

Poliovirus History

The WPV1 viruses in Afghanistan for 2009 and 2010 represent an evolving transmission pattern. There were viruses from 5 genetic clusters isolated in 2009, while only two of these have been detected in Afghanistan in 2010. In contrast to earlier years, two of these genetic clusters are only represented by isolates that appear to be the result of importation from Pakistan and not continued transmission from earlier years. Two of the clusters represent indigenous transmission and are related to 2008 viruses detected in Afghanistan. The last cluster, which accounts for half of the cases, represents indigenous transmission, particularly in Helmand province, as well as some crossborder transmission with Pakistan in Kandahar province. The viruses in 2010 represent both a new importation from Pakistan and continued circulation of one cluster in the south. The WPV3 viruses in 2009 are from a single genetic cluster. Most of the isolates from this cluster are from chains of transmission that are only within Afghanistan, with only a few isolates related to viruses that are an indication of cross-border transmission. In 2010, two genetic clusters were observed. One represents continued circulation of the same cluster seen in 2009, but includes a likely importation from Pakistan of a different chain of transmission. The new cluster observed in 2010 is most closely related to viruses that caused a large outbreak in 2007 and were last seen in 2008 in southern Afghanistan and therefore represents undetected circulation for a period of at least two years. Based upon the close genetic linkage among many of the virus isolates, it is unlikely that there are significant missed chains of transmission in much of Afghanistan. However, a few isolates have less genetic linkage than expected, including an example of significant

Afghanistan

Total number of states \ provinces: 32

missed transmission, which is an indication that surveillance has gaps at the sub-national level.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	0

Angola

Total number of states \ provinces: 18

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	73%	Pol3	73%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
10%	Non-adjusted 100% (2 of 2)	% within acceptable range 100% (2 of 2)		
Percent 4+ doses (national)	Percent states with > 80% 4	+dose NPAFP children		
32%	Non-adjusted 0% (0 of 2)	% within acceptable range 0% (0 of 2)		

Independent Monitoring

		T .		T	
		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house
SNID-mOPV1	23-Apr-10	7.4	6.6	100% (1 of 1)	100% (1 of 1)
SNID-mOPV1	07-May-10	10.7	10.7	67% (4 of 6)	67% (4 of 6)
SNID-mOPV1	04-Jun-10	9.6	9.5	50% (1 of 2)	50% (1 of 2)
NID-tOPV	11-Jun-10	12.4	14.9	42% (5 of 12)	67% (8 of 12)
SNID-mOPV1	18-Jun-10	6.5	6.8	100% (1 of 1)	100% (1 of 1)

Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	29	10	18	10	17-Jun-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
3.2	Non-adjusted 89% (16 of 18)	% within acceptable range	100% (18 of 18)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
92.3%	Non-adjusted 100% (8 of 8)	% within acceptable range	100% (8 of 8)	

Poliovirus History

The WPV1 viruses in Angola during 2009 and 2010 represented an outbreak resulting from importation from India in 2007. Only one genetic cluster has been observed. In 2009, most of the cases were distributed in the western part of the country and included moderate regional transmission. In 2010, cases were distributed more widely including the northeastern part of the country and included moderate regional transmission. The cases in 2010 represented continued circulation from 2009 and not a new importation and marked the third consecutive year of transmission of this virus. WPV1 and WPV3 related to earlier importation events were not observed in 2009 and 2010. Based upon multiple isolates from both 2009 and 2010 with less genetic linkage than expected, there is indication that surveillance may have gaps at the sub-national level.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	5.1

Benin

Total number of states \ provinces: 12

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	83%	Pol3	83%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
8%	Non-adjusted % within acceptable range		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
60%	Non-adjusted	% within acceptable range	

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of state missed of	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	06-Mar-10	2.4		100% (11 of 11)	
NID-bOPV	24-Apr-10	2.9	6.9	100% (12 of 12)	67% (6 of 9)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	lan-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	20	14			19-Apr-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.3	Non-adjusted 75% (9 of 12) % within acceptable range 92% (11 of 12)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
96.7%	Non-adjusted	% within acceptable range		

Poliovirus History

The WPV1 viruses in Benin during 2009 represented mostly continuation of an outbreak that started in 2008. Two of the three clusters observed in 2008 have not been seen in Benin since then. The 2009 outbreak centered in southern Benin and was a cross-border outbreak with states in Southwestern Nigeria. The transmission likely included one or more additional importations, but also significant local transmission. One virus from Northeastern Benin represented a single importation event in 2009 with no evidence of subsequent local transmission. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	7.3

Burkina Faso

Total number of states \ provinces: 13

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	82%	Pol3	84%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
3%	Non-adjusted 100%	(1 of 1)	% within acceptable range	100% (1 of 1)	
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
88%	Non-adjusted 100%	(1 of 1)	% within acceptable range	100% (1 of 1)	

Independent Monitoring

		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	06-Mar-10	3.7		100% (13 of 13)	
NID-mOPV3	02-Apr-10	2.7		100% (13 of 13)	
NID-mOPV3	07-May-10	2.8	15.5	100% (13 of 13)	23% (3 of 13)
SNID-mOPV3	28-May-10	1.2	5.8	100% (7 of 7)	100% (7 of 7)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	15	11			25-Oct-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
4	Non-adjusted 100% (13 of 13)	% within acceptable range	100% (13 of 13)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
88.4%	Non-adjusted 82% (9 of 11)	% within acceptable range	100% (11 of 11)	

Poliovirus History

The WPV1 viruses in Burkina Faso during 2009 represent a complex pattern of transmission that includes continuation of outbreaks that started in 2008 as a result of at least two separate importations, as well as one or more additional importations or cross-border transmission in 2009. The viruses in 2009 were from two genetic clusters, both originating in 2008 as part of the larger outbreak in West Africa originating from viruses circulating in Nigeria. More detailed genetic analysis is needed to fully characterize this transmission in Burkina Faso and neighboring countries. The 2009 outbreak largely centered in central Burkina Faso and represented significant local transmission. Based upon the close genetic linkage among most of the virus isolates, it is unlikely that there are significant missed chains of transmission, however, a few isolates have less genetic linkage than expected, which is an indication that surveillance may have gaps at the sub-national level.

Percent of NPAFP cases with unknown age	1
Percent of 6-35 month old NPAFP cases with unknown dose history	5.8

Burundi

Total number of states \ provinces: 17

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP 9	2 % F	ol3 96 %	
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
0%	Non-adjusted 100% (1 of 1)	% within acceptable range	100% (1 of 1)	
Percent 4+ doses (national)	Percent states with > 80% 4+dos	e NPAFP children		
0%	Non-adjusted 0% (0 of 1)	% within acceptable range	0% (0 of 1)	

Independent Monitoring

		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	2	1			12-Sep-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
4.1	Non-adjusted 76% (13 of 17)	% within acceptable range 88% (15 of 17)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
78.8%	Non-adjusted 50% (2 of 4)	% within acceptable range 50% (2 of 4)		

Poliovirus History

The WPV1 viruses in Burundi during 2009 resulted from a single importation event from DRC. This virus in DRC represents continuation of an outbreak that started in 2006, following importation from Angola to DRC. The two cases in 2009 indicate only limited local transmission. Although data is limited, the close genetic linkage between the two viruses in Burundi and the genetic gap with earlier DRC viruses from 2008 give no indication of missed chains of transmission in Burundi, but most likely unobserved viruses in DRC.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	21.1

Cameroon

Total number of states \ provinces: 10

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	80%	Pol3	79%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
3%	Non-adjusted 100% (3 of	3) % within acceptable range 10	0% (3 of 3)	
Percent 4+ doses (national)	Percent states with > 80%	4+dose NPAFP children		
50%	Non-adjusted 0% (0 of 3)	% within acceptable range 0%	6 (0 of 3)	

Independent Monitoring

	_				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of state	
		House to House (%)	Out of house (%)	House to House	Out of house
SNID-mOPV3	05-Mar-10	8.8	16.4	75% (3 of 4)	25% (1 of 4)
SNID-mOPV3	23-Apr-10	7.8	11.7	75% (3 of 4)	50% (2 of 4)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W3	3	2			15-Oct-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.5	Non-adjusted 70% (7 of 10) % within acceptable range 90% (9 of 10)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
84.6%	Non-adjusted 57% (4 of 7) % within acceptable range 100% (7 of 7)			

Poliovirus History

The WPV3 viruses in Cameroon during 2009 represented two importation events from two neighboring countries with active WPV3 outbreaks in 2009. The viruses were from two distinct genetic clusters, one clearly related to circulation in parts of Central Nigeria and the second related to viruses in western Chad. The viruses from Chad indicate very limited local transmission (two cases). There was little indication of missed chains of transmission based upon the close genetic linkage among isolates.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	1.1

Central African Republic

Total number of states \ provinces: 7

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP 54% Pol3 47	%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
2%	Non-adjusted 100% (1 of 1)	% within acceptable range 100% (1 of 1)		
Percent 4+ doses (national)	Percent states with > 80% 4+do	ose NPAFP children		
27%	Non-adjusted 0% (0 of 1)	% within acceptable range 0% (0 of 1)		

Independent Monitoring

-	_				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of state missed of	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV3	05-Mar-10	9.8	13.6	50% (3 of 6)	33% (2 of 6)
NID-mOPV3	23-Apr-10	10.1	10.2	50% (3 of 6)	50% (3 of 6)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	lan-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W3	14	1			09-Aug-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
8	Non-adjusted 100% (6 of 6) % within acceptable range 100% (6 of 6)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
90.6%	Non-adjusted 80% (4 of 5)	% within acceptable range 100% (5 of 5)		

Poliovirus History

The WPV3 viruses in Central African Republic during 2009 represented a very focal outbreak resulting from importation in early 2009, most likely from Chad. Only a single genetic cluster was observed. The 2009 outbreak centered in western Central African Republic and the virus was related to circulation in Chad in 2008 and more distantly related to circulation in parts of northern Nigeria in 2008 and 2009. The transmission likely represented only a single importation event, but with significant local transmission. The WPV1 virus imported from DRC has not been observed since 2008. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates.

Data Completeness

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	18.9

Page 8

Chad

Total number of states \ provinces: 18

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	23%	Pol3	36%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
13%	Non-adjusted 100%	% (1 of 1)	% within acceptable range	100% (1 of 1)
Percent 4+ doses (national)	Percent states with	> 80% 4+dose	NPAFP children	
42%	Non-adjusted 0% (0 of 1)	% within acceptable range	0% (0 of 1)

Independent Monitoring

	National indicator		Sub national indicator		
Campaign type	Date	Percent missed children (finger marking)		Percent of state	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-tOPV	10-Feb-10	15.3	25.8	33% (3 of 9)	12% (1 of 8)
NID-mOPV3	06-Mar-10		5.5		100% (1 of 1)
NID-mOPV3	24-Apr-10	8.9	11.3	69% (9 of 13)	54% (7 of 13)
SNID-mOPV3	30-May-10	6.5	16.3	100% (1 of 1)	0% (0 of 1)
NID-mOPV3	07-Jun-10	10.5	11.6	29% (2 of 7)	40% (2 of 5)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W3	64	29	14	9	22-May-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
4.9	Non-adjusted 100% (17 of 17)	% within acceptable range	100% (17 of 17)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
83.9%	Non-adjusted 50% (5 of 10)	% within acceptable range	1000((10	

Poliovirus History

The WPV3 viruses in Chad during 2009 represented continuation of a large widespread outbreak resulting from importation in 2007. In addition, two single case importation events also occurred in 2009 from Nigeria. The 2009 viruses represent three genetic clusters. WPV3 viruses detected in 2010 represented continued circulation of the main cluster observed in 2009, as well as a single importation event from Nigeria with only a single case. These 2010 viruses represent two of the three genetic clusters observed in 2009. One of the outbreak clusters observed in Chad during 2008 that was subsequently imported into Central African Republic in 2009 has not been observed in Chad since 2008. Based upon several isolates with less genetic linkage than expected, there is some indication that surveillance may have gaps at the sub-national level.

Percent of NPAFP cases with unknown age	8.0
Percent of 6-35 month old NPAFP cases with unknown dose history	12.4

Côte d'Ivoire

Total number of states \ provinces: 19

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	81%	Pol3	77%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
6%	Non-adjusted	% within acceptable range	
Percent 4+ doses (national)	Percent states with >	80% 4+dose NPAFP children	
44%	Non-adjusted	% within acceptable range	

Independent Monitoring

	_				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	26-Mar-10	2.4	7.8	100% (19 of 19)	74% (14 of 19)
NID-mOPV1	23-Apr-10	2.4	4.9	100% (19 of 19)	95% (18 of 19)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		(Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	26	19			06-Aug-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2		
3	Non-adjusted 89% (17 of 19)	% within acceptable range	100% (19 of 19)
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%		
70.3%	Non-adjusted 38% (3 of 8)	% within acceptable range	62% (5 of 8)

Poliovirus History

The WPV1 viruses in Cote d'Ivoire during 2009 represented an outbreak resulting from one importation in 2008 and one or more additional importation events in 2009 that represent continuation of the large outbreak in West Africa that started in 2008. The outbreak in Cote d'Ivoire represented extensive circulation in parts of the south and west of the country. The viruses are from two genetic clusters, with most of the cases in one cluster. The two cases in the minor cluster represent an importation from Burkina Faso in early 2009, with no evidence of continued circulation beyond the middle of the year. The 2009 importation events in the other genetic cluster are likely from Burkina Faso. Viruses from Cote d'Ivoire were also the likely source for importations into Liberia and Guinea. Based upon the close genetic linkage among most of the virus isolates, it is unlikely that there are significant missed chains of transmission; however, a few isolates have less genetic linkage than expected, which is an indication that surveillance may have gaps at the sub-national level.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	9.4

Democratic Republic of the Congo

Total number of states \ provinces: 11

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	77%	Pol3	74%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
12%	Non-adjusted 45% ((5 of 11)	% within acceptable range	55% (6 of 11)
Percent 4+ doses (national)	Percent states with >	> 80% 4+dose	NPAFP children	
33%	Non-adjusted 0% (0	of 11)	% within acceptable range	0% (0 of 11)

Independent Monitoring

•	_				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
SNID-mOPV1	04-Jun-10	5.8	11.3	50% (1 of 2)	50% (1 of 2)
SNID-mOPV1	18-Jun-10	12.5	5.9	0% (0 of 2)	100% (2 of 2)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	ount		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W3	3	2	3	4	27-Jun-09
cVDPV2	5	5	4	4	22-Apr-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2		
4.7	Non-adjusted 100% (11 of 11)	% within acceptable range	100% (11 of 11)
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%		
87.2%	Non-adjusted 100% (11 of 11)	% within acceptable range	100% (11 of 11)

Poliovirus History

The WPV3 viruses in Democratic Republic of Congo during 2009 represented both an additional case following an importation from Angola in 2008 and a new importation in 2009 from Angola with only very focal spread. Only a single genetic cluster was observed. The WPV1 viruses detected in 2010 represented two new importation events from Angola, with some local circulation in one case. In addition, the most recent WPV1 represents continued circulation of virus that was last seen in eastern DRC in mid-2008. There was little indication of missed chains of transmission for the Kasai Occidental WPV1 viruses based upon the close genetic linkage among isolates; however, the large genetic distance of the recent Katanga virus indicates a significant surveillance gap, likely somewhere in eastern DRC.

Percent of NPAFP cases with unknown age	0.4
Percent of 6-35 month old NPAFP cases with unknown dose history	9

Eritrea

Total number of states \ provinces: 6

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	99%	Pol3	99%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
0%	Non-adjusted	% within acceptable range	
Percent 4+ doses (national)	Percent states with >	80% 4+dose NPAFP children	
31%	Non-adjusted	% within acceptable range	

Independent Monitoring

•	•				
		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
6.2	Non-adjusted 100% (5 of 5)	% within acceptable range	100% (5 of 5)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
98.9%	Non-adjusted 100% (1 of 1)	% within acceptable range	100% (1 of 1)	

Poliovirus History

No recent virus

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	11.1

Ethiopia

Total number of states \ provinces: 11

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	79%	Pol3	76%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
10%	Non-adjusted 60% (3 of 5)	% within acceptable range	100% (5 of 5)	
Percent 4+ doses (national)	Percent states with > 80% 4+dos	se NPAFP children		
24%	Non-adjusted 0% (0 of 5)	% within acceptable range	0% (0 of 5)	

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
SNID-mOPV3	11-Jun-10	14.8	16.9	50% (2 of 4)	25% (1 of 4)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	lan-Jun)	Date of onset
	cases	districts	cases	districts	for last case
cVDPV2	1	1			16-Feb-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.8	Non-adjusted 80% (8 of 10)	% within acceptable range	80% (8 of 10)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
86.9%	Non-adjusted 86% (6 of 7)	% within acceptable range	86% (6 of 7)	

Poliovirus History

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	6.1

Gambia

Total number of states \ provinces: 6

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	98%	Pol3	97%	
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
0%	Non-adjusted % within acceptable range		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
100%	Non-adjusted	% within acceptable range	

Independent Monitoring

		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	06-Mar-10	4.6	35.1	100% (6 of 6)	67% (4 of 6)
NID-mOPV1	24-Apr-10	1.9	5.5	100% (6 of 6)	100% (6 of 6)
NID-mOPV1	28-May-10	2.4	4.3	100% (6 of 6)	83% (5 of 6)
NID-mOPV1	25-Jun-10	2.7	5.5	100% (6 of 6)	100% (6 of 6)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	lan-Jun)	Date of onset
	cases	districts	cases	districts	for last case

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2		
	Non-adjusted	% within acceptable range	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%		
	Non-adjusted	% within acceptable range	

Poliovirus History

No recent virus

Data Completeness

Percent of NPAFP cases with unknown age	2.9
Percent of 6-35 month old NPAFP cases with unknown dose history	7.7

Page 14

Ghana

Total number of states \ provinces: 10

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	94%	Pol3	94%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
0%	Non-adjusted 100% (2 of 2)	% within acceptable range	100% (2 of 2)	
Percent 4+ doses (national)	Percent states with > 80% 4+	dose NPAFP children		
73%	Non-adjusted 0% (0 of 2)	% within acceptable range	0% (0 of 2)	

Independent Monitoring

-	_					
		National indicator		Sub national indicator		
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	es with < 10% children	
		House to House (%)	Out of house (%)	House to House	Out of house	
NID-mOPV1	05-Mar-10	4.6	2.5	100% (10 of 10)	100% (10 of 10)	
NID-mOPV1	23-Apr-10	4.8	2.7	100% (10 of 10)	90% (9 of 10)	

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.1	Non-adjusted 60% (6 of 10) % within acceptable range 90% (9 of 10)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
84.3%	Non-adjusted 67% (6 of 9)	% within acceptable range	100% (9 of 9)	

Poliovirus History

No recent virus

Data Completeness

Percent of NPAFP cases with unknown age	0.4
Percent of 6-35 month old NPAFP cases with unknown dose history	4.1

Page 15

Guinea

Total number of states \ provinces: 8

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP 57 % Pol3 5	3%
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Non Polio AFP Profile

Percent 0-dose (national) 2%	Percent states with < 10% 0-dose NPAFP children Non-adjusted 100% (1 of 1) % within acceptable range 100% (1 of 1)			
Percent 4+ doses (national)	Percent states with > 80% 4+dos	e NPAFP children		
57%	Non-adjusted 100% (1 of 1)	% within acceptable range	100% (1 of 1)	

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	06-Mar-10	7.3	10.2	75% (6 of 8)	62% (5 of 8)
NID-mOPV1	27-Mar-10	0.2	1.9	100% (8 of 8)	100% (8 of 8)
NID-mOPV1	24-Apr-10	0.2	3.2	100% (8 of 8)	100% (8 of 8)
NID-mOPV1	28-May-10	0.1	1.5	100% (8 of 8)	100% (8 of 8)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		(Count	ınt			
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset		
	cases	districts	cases	districts	for last case		
W1	42	19			03-Nov-09		

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.8	Non-adjusted 75% (6 of 8) % within acceptable range 88% (7 of 8)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
89.8%	Non-adjusted 80% (4 of 5)	% within acceptable range	100% (5 of 5)	

Poliovirus History

The WPV1 viruses in Guinea during 2009 represented an outbreak resulting from one or more importations events in 2009 that represent continuation of the large outbreak in West Africa that started in 2008. The outbreak in Guinea represented extensive circulation throughout large parts of the country. The viruses are all from a single cluster, with importations from Cote d'Ivoire and/or Burkina Faso and evidence of limited cross-border transmission with Sierra Leone. Viruses from Guinea were also the likely source for importations into Sierra Leone, Mali, Senegal, and Liberia. The latter two events in 2010 highlight the possibility of virus circulation in 2009 having continued at least at a low level into 2010 in Guinea. Based upon the close genetic linkage among most of the virus isolates, it is unlikely that there are significant missed chains of transmission; however, a few isolates have less genetic linkage than expected, which is an indication that surveillance may have gaps at the sub-national level.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	18.2

Guinea-Bissau

Total number of states \ provinces: 9

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	68%	Pol3	72%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
0%	Non-adjusted % within acceptable range			
Percent 4+ doses (national)	Percent states with >	80% 4+dose NPAFP children		
100%	Non-adjusted	% within acceptable range		

Independent Monitoring

		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	06-Mar-10	4.7	8.5	86% (6 of 7)	80% (4 of 5)
NID-mOPV1	24-Apr-10	2.7	5	100% (7 of 7)	67% (4 of 6)
NID-mOPV1	28-May-10	1.9	0.8	100% (11 of 11)	100% (11 of 11)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (Jan-Dec)		2010 (J	lan-Jun)	Date of onset
	cases	districts	cases	districts	for last case

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.5	Non-adjusted 67% (2 of 3) % within acceptable range 100% (3 of 3)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
61.9%	Non-adjusted	% within acceptable range		

Poliovirus History

Data Completeness

Percent of NPAFP cases with unknown age	4.8
Percent of 6-35 month old NPAFP cases with unknown dose history	0

Page 17

India

Total number of states \ provinces: 35

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP **66%** Pol3 **67%**

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-do		
0%	Non-adjusted 100% (22 of 22)	% within acceptable range	100% (22 of 22)
Percent 4+ doses (national)	Percent states with > 80% 4+d	ose NPAFP children	
97%	Non-adjusted 100% (22 of 22)	% within acceptable range	100% (22 of 22)

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house

Detailed state level independent monitoring data not available.

Surveillance

Polio Cases (W1, W3, and VDPVs)

		Count			
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	79	34	7	5	13-Jun-10
W1W3	1	1			23-May-09
W3	661	47	18	11	14-Jun-10
cVDPV2	19	9	3	3	08-Feb-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
11.7	Non-adjusted 94% (32 of 34)	% within acceptable range	97% (33 of 34)	
% adequate stools (nat.)	Percent states with adequate sto	ool proportion >= 80%		
83%%	Non-adjusted 85% (23 of 27)	% within acceptable range	85% (23 of 27)	

Poliovirus History

The WPV1 virus in India during 2009 and 2010 represent an improving situation of endemic transmission. The viruses observed in 2009 represented continued transmission within a single genetic cluster primarily in two distinct geographic foci. In Uttar Pradesh, the virus represented continued circulation following the large outbreak following importation from Bihar in 2008. In Bihar, endemic transmission continued along several chains of transmission. Sporadic importation into other states in India was also observed, but with limited or no continued transmission. However, more than one instance of continued subsequent transmission in other states was observed, including detection of virus in a sewage sample from Egypt. By 2010, the number of WPV1 cases was reduced considerably. All cases in four different states, and including two instances of international spread to Nepal were related to virus ast observed in Bihar in 2009. In several instances, limited local transmission was observed following these importations. The WPV3 virus in India during 2009 represented a very large outbreak, mostly confined to the two northern states of Uttar Pradesh and Bihar. The viruses observed in 2009 represented continued transmission within seven related genetic clusters that had evolved from a single 2008 genetic cluster primarily in two distinct geographic foci. In Uttar Pradesh, the virus represented continued circulation following the large outbreak following importation from Bihar in 2008. In Bihar, endemic transmission continued along several chains of transmission. Sporadic importation into other states in India was also observed, but with limited or no continued transmission. By 2010, the number of WPV3 cases was reduced considerably and viruses from only four genetic clusters have been observed.

India

Total number of states \ provinces: 35

These included both continued transmission in UP and Bihar, but also a new importation event and continued transmission in a neighboring state.

Based upon the close genetic linkage among many of the virus isolates, it is unlikely that there are significant missed chains of transmission in much of India. However, a few isolates have less genetic linkage than expected, which is an indication that surveillance may have gaps at the sub-national level, with particular concern in parts of Bihar.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	1.7

Kenya

Total number of states \ provinces: 8

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	75%	Pol3	71%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-d	ose NPAFP children	
6%	Non-adjusted 100% (3 of 3)	% within acceptable range 100% (3 of	f 3)
Percent 4+ doses (national)	Percent states with > 80% 4+0	lose NPAFP children	
35%	Non-adjusted 0% (0 of 3)	% within acceptable range 0% (0 of 3))

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house

Surveillance

Polio Cases (W1, W3, and VDPVs)

		(Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	19	3			30-Jul-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.1	Non-adjusted 50% (4 of 8)	% within acceptable range	100% (8 of 8)	
% adequate stools (nat.)	Percent states with adequate stoo	ol proportion >= 80%		
87.6%	Non-adjusted 75% (6 of 8)	% within acceptable range	100% (8 of 8)	

Poliovirus History

The WPV1 viruses in Kenya during 2009 represented a focal outbreak resulting from importation in early 2009 from southern Sudan. Only one genetic cluster was observed. The 2009 outbreak was centered in northern Kenya and included significant local transmission. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates.

Percent of NPAFP cases with unknown age	0.3
Percent of 6-35 month old NPAFP cases with unknown dose history	14.3

Liberia

Total number of states \ provinces: 15

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP **64**% Pol3 **74**%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
5%	Non-adjusted	% within acceptable range	
Percent 4+ doses (national)	Percent states with >	80% 4+dose NPAFP children	
21%	Non-adjusted	% within acceptable range	

Independent Monitoring

		National	indicator	Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	05-Mar-10	2	10.7	93% (14 of 15)	73% (11 of 15)
NID-mOPV1	23-Apr-10	4.1	5.3	93% (14 of 15)	87% (13 of 15)
NID-mOPV1	28-May-10	3	3.6	100% (15 of 15)	93% (14 of 15)
NID-mOPV1	25-Jun-10	5	5.2	93% (14 of 15)	100% (15 of 15)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (Jan-Dec)		2010 (Jan-Jun)		Date of onset
	cases	districts	cases	districts	for last case
W1	11	6	1	1	03-Mar-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
2.7	Non-adjusted 40% (2 of 5)	% within acceptable range 80% (4 of 5)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
100%%	Non-adjusted	% within acceptable range			

Poliovirus History

The WPV1 viruses in Liberia during 2009 represented a moderate outbreak resulting from importation in early 2009 from Cote d'Ivoire. Only one genetic cluster was observed. The 2009 outbreak was distributed in several parts of the country and included moderate local transmission. The case in 2010 represented a new importation event and not continued circulation from 2009. There was little indication of missed chains of transmission in 2009 based upon the close genetic linkage among most of the isolates, although the 2010 isolate had less genetic linkage than expected.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	0

Mali

Total number of states \ provinces: 9

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP **74**% Pol3 **74**%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
2%	Non-adjusted 100% (1 of 1)	% within acceptable range 100% (1 of 1)			
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
63%	Non-adjusted 0% (0 of 1)	% within acceptable range 0% (0 of 1)			

Independent Monitoring

		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	06-Mar-10	11.2		33% (3 of 9)	
SNID-mOPV1	26-Mar-10	2.9	10.1	100% (1 of 1)	0% (0 of 1)
NID-mOPV1	24-Apr-10	5.9	11	89% (8 of 9)	44% (4 of 9)
NID-mOPV1	28-May-10	5.7	7.5	83% (5 of 6)	83% (5 of 6)
SNID-mOPV1	25-Jun-10	5.7	7.6	71% (5 of 7)	57% (4 of 7)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (Jan-Dec)		2010 (Jan-Jun)		Date of onset
	cases	districts	cases	districts	for last case
W1	2	2	3	3	01-May-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
2.6	Non-adjusted 62% (5 of 8) % within acceptable range 88% (7 of 8)				
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
92.2%	Non-adjusted 100% (7 of 7)	% within acceptable range	100% (7 of 7)		

Poliovirus History

The two WPV1 viruses in Mali during 2009 represented continued circulation from an importation in 2008 and an additional importation late in 2009, probably from Guinea. These two viruses are from two genetic clusters. The three viruses detected in 2010 represent continued transmission from the importation late in 2009, as well as two independent importations from Burkina Faso and Mauritania. There is little evidence of significant local transmission. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates, although one of the 2010 isolates had less genetic linkage than expected.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	1.7

Mauritania

Total number of states \ provinces: 13

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	64%	Pol3	63%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
10%	Non-adjusted % within acceptable range			
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children			
58%	Non-adjusted	% within acceptable range		

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	16-Feb-10	34.6		8% (1 of 13)	
NID-mOPV1	06-Mar-10	26.8	38.3	23% (3 of 13)	0% (0 of 2)
NID-mOPV1	27-Mar-10	23.7	24.9	54% (7 of 13)	8% (1 of 13)
NID-mOPV1	24-Apr-10	13.4	13.8	46% (6 of 13)	46% (6 of 13)
NID-mOPV1	28-May-10	12.6	12.3	46% (6 of 13)	31% (4 of 13)
NID-mOPV1	25-Jun-10	5.2	5.7	92% (12 of 13)	85% (11 of 13)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	13	12	5	4	28-Apr-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
4.9	Non-adjusted 71% (5 of 7)	% within acceptable range 7	71% (5 of 7)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
96.4%	Non-adjusted 100% (2 of 2)	% within acceptable range 1	100% (2 of 2)	

Poliovirus History

The WPV1 viruses in Mauritania during 2009 represented a moderate outbreak resulting from importation at an uncertain time before the middle of 2009, probably from Cote d'Ivoire. Only one genetic cluster was observed. The 2009 outbreak was widely distributed within the country and included moderate local transmission. The first three cases in 2010 represented continued circulation from 2009 and not a new importation. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	3.1

Nepal

Total number of states \ provinces: 5

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	82%	Pol3	82%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
0%	Non-adjusted 100% (4 of 4)	% within acceptable range	100% (4 of 4)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
91%	Non-adjusted 100% (4 of 4)	% within acceptable range	100% (4 of 4)		

Independent Monitoring

		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
Mop-up-mOP	19-Jun-10	12	30.2	60% (3 of 5)	0% (0 of 5)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	0	0	5	2	09-Jun-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
4.4	Non-adjusted 100% (5 of 5)	% within acceptable range	100% (5 of 5)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
88.9%	Non-adjusted 80% (4 of 5)	% within acceptable range	100% (5 of 5)		

Poliovirus History

The WPV1 viruses in Nepal during 2010 represented two importation events from Bihar in India. The viruses were from a single genetic cluster related to circulation in Bihar in 2009. One importation resulted in only a single virus detected in early 2010, while the second importation resulted in four cases through the middle of 2010 and those indicate local transmission. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates in the second importation event, although the early 2010 isolate had less genetic linkage than expected.

Data Completeness

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	0.6

Page 24

Niger

Total number of states \ provinces: 8

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	70%	Pol3	71%
	, .		/ -

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
4%	Non-adjusted 100% (4 of 4)	% within acceptable range	100% (4 of 4)		
Percent 4+ doses (national)	Percent states with > 80% 4+dos	se NPAFP children			
65%	Non-adjusted 0% (0 of 4)	% within acceptable range	0% (0 of 4)		

Independent Monitoring

		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-bOPV	26-Mar-10	4	7.7	100% (8 of 8)	67% (4 of 6)
NID-mOPV1	24-Apr-10	3	5	100% (8 of 8)	100% (8 of 8)
SNID-mOPV3	28-May-10	4	9.1	100% (2 of 2)	50% (1 of 2)

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	1	1			28-May-09
W3	14	9	2	1	01-Apr-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
4.9	Non-adjusted 100% (8 of 8) % within acceptable range 100% (8 of 8)				
	Percent states with adequate stool proportion >= 80%				
% adequate stools (nat.)	Percent states with adequate stoo	ol proportion >= 80%			

Poliovirus History

The WPV3 viruses in Niger during 2009 represent continued circulation from an importation in 2008 and at least seven additional importations in 2009, all likely from Nigeria, with one possible importation from Chad. These WPV3 viruses are from seven distinct genetic clusters. The WPV3 detected in 2010 represents a new importation from Nigeria. There is little evidence of significant local transmission, other than the one 2008/2009 outbreak. The WPV1 in 2009 represented a single importation event. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates, although the one 2009 WPV1 and the one 2010 WPV3 isolates had significantly less genetic linkage than expected.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	2.6

Nigeria

Total number of states \ provinces: 37

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP **42**% Pol3 **54**%

Non Polio AFP Profile

Percent 0-dose (national) 4%	Percent states with < 10% 0-dose NPAFP children Non-adjusted 95% (35 of 37) % within acceptable range 97% (36 of 37)				
Percent 4+ doses (national)	Percent states with > 80% 4+dos	e NPAFP children			
65%	Non-adjusted 35% (13 of 37)	% within acceptable range	41% (15 of 37)		

Independent Monitoring

•	•				
		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house

Detailed state level independent monitoring data not available.

Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2009 (Jan-Dec) 2010 (Jan-Jun)				Date of onset
	cases	districts	cases	districts	for last case
W1	75	53	3	3	18-Jun-10
W3	313	159	3	3	15-Jun-10
cVDPV2	154	98	9	9	21-May-10

Non Polio AFP data

٨	IPAFP rate (national)	Percent states with NPAFP rate >= 2			
	7.4	Non-adjusted	100% (37 of 37)	% within acceptable range	100% (37 of 37)
9	6 adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
	95.6%	Non-adjusted	100% (37 of 37)	% within acceptable range	100% (37 of 37)

Poliovirus History

The WPV1 virus in Nigeria during 2009 and 2010 represents the continued transmission from the very large outbreak in 2008. The genetic diversity of the WPV1 virus chains of transmission in 2008 was the greatest in the world and represented 31 distinct genetic clusters. In 2009, the number of cases was significantly reduced and 18 of the 2008 genetic clusters were still observed. However, only four genetic clusters accounted for nearly two-thirds of the cases, and eight genetic clusters only had a single virus isolate and four more had only two isolates. Despite the small number of cases in the last six months of 2009 (six cases from four genetic clusters), the three viruses from 2010 as well as three from the last half of 2009 had much less genetic linkage than expected, and both genetic clusters observed in 2010 were not observed in the last half of 2009. The WPV3 virus in Nigeria during 2009 represents a large, widespread outbreak. The genetic diversity of the WPV3 virus chains of transmission in 2009 was the greatest in the world and represented 20 distinct genetic clusters. Seven of the 2008 genetic clusters were not observed in 2009 or 2010. However, at least eight of these 2009 genetic clusters were not detected in 2008. Only three genetic clusters accounted for nearly two-thirds of the cases. In the latter half of 2009, the number of cases was significantly reduced, but still represented nine genetic clusters and only one of the two observed in 2010. All three viruses from 2010 as well as 7 of 24 from the last half of 2009 had much less genetic linkage than expected. □ □Based upon the close genetic linkage among many of the virus isolates in 2009, it is unlikely that there are significant missed chains of transmission in much of Nigeria. However, the significant proportion of isolates with much less genetic linkage than expected during the last year indicates the potential for significant surveillance gaps at the sub-national level.

Nigeria

Total number of states \ provinces: 37

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	0.6

Pakistan

Total number of states \ provinces: 7

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP **85**% Pol3 **85**%

Non Polio AFP Profile

Percent 0-dose (national) 2%	Percent states with < 10% 0-dose NPAFP children Non-adjusted 100% (5 of 5) % within acceptable range 100% (5 of 5)			
Percent 4+ doses (national)	Percent states with > 80% 4+dose	e NPAFP children		
94%	Non-adjusted 80% (4 of 5)	% within acceptable range	100% (5 of 5)	

Independent Monitoring

-	_				
		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house

Independent monitoring data were used to assess the country specific Major Process Indicator. Please refer to the Risk Assessment document, annex-5, for details.

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (Jan-Dec) 2010 (Jan-Jun)			Date of onset	
	cases	districts	cases	districts	for last case
W1	60	26	15	9	18-Jun-10
W1W3	1	1			29-Jul-09
W3	28	12	16	10	24-Jun-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
6.1	Non-adjusted 86% (6 of 7)	% within acceptable range	100% (7 of 7)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
90%%	Non-adjusted 100% (6 of 6)	% within acceptable range	100% (6 of 6)		

Poliovirus History

The WPV1 virus in Pakistan during 2009 and 2010 represent a complex pattern of endemic transmission. In 2009, the viruses were from four genetic clusters, all of which were also found in Afghanistan. However, the various chains of transmission were often distinct from those in Afghanistan. More than half the WPV1 cases were from a single genetic cluster with multiple chains of transmission correlated with at least four geographic areas in all four provinces. In all instances, there is evidence of local transmission. In the case of Baluchistan, there is also evidence of cross-border transmission in addition to local circulation. In 2010, the viruses were from three genetic clusters, with two-thirds of the isolates from a single cluster with mostly local transmission in NWFP. The few viruses from Puniab, however, represented residual circulation from all three genetic clusters. □ The WPV3 virus in Pakistan during 2009 and 2010 represent a somewhat improving situation of endemic transmission. In 2009, the viruses were from three genetic clusters, one of which was also found in Afghanistan. However, the chains of transmission for this cluster were often distinct from those in Afghanistan. More than half the WPV1 cases were from a single genetic cluster with multiple chains of transmission correlated with at least three geographic areas in three provinces. The remaining two clusters were largely focused in NWFP. In all instances, there is evidence of local transmission with the exception of three isolates in Baluchistan that may represent cross-border transmission. In 2010, the viruses were only from a single genetic cluster with mostly local transmission in NWFP. □□Based upon the close genetic linkage among many of the virus isolates in early 2009, it is unlikely that there are significant missed chains of transmission in some parts of Pakistan. However, the significant proportion of isolates with much less genetic linkage than expected during the last year indicates the potential for surveillance gaps at the sub-national level.□

Pakistan

Total number of states \ provinces: 7

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	0

Senegal

Total number of states \ provinces: 11

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	86%	Pol3	83%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
7%	Non-adjusted 67% (2 of 3)	% within acceptable range 100% (3 of 3)		
Percent 4+ doses (national)	Percent states with > 80% 4+do.	se NPAFP children		
40%	Non-adjusted 0% (0 of 3)	% within acceptable range 0% (0 of 3)		

Independent Monitoring

		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house
SNID-mOPV1	06-Feb-10	11.6	18.1	45% (5 of 11)	27% (3 of 11)
NID-mOPV1	27-Mar-10	6.7	8.6	85% (11 of 13)	54% (7 of 13)
NID-mOPV1	24-Apr-10	6	7.8	77% (10 of 13)	69% (9 of 13)
NID-mOPV1	29-May-10	5	8.3	92% (12 of 13)	85% (11 of 13)
NID-mOPV1	26-Jun-10	4.7	9.6	85% (11 of 13)	62% (8 of 13)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	0	0	18	11	30-Apr-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
5.8	Non-adjusted 100% (11 of 11)	% within acceptable range	100% (11 of 11)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
68.1%	Non-adjusted 33% (3 of 9)	% within acceptable range	56% (5 of 9)	

Poliovirus History

The WPV1 viruses in Senegal during 2010 represented a moderate outbreak resulting from three importations in 2010 from Guinea and Mauritania. Only one genetic cluster was observed. The 2010 outbreak was distributed mostly in the western part of the country and included moderate local transmission. All three importation events date to early 2010, or earlier. Two of the importations were most likely from Guinea, while one was probably from Mauritania. There was little indication of missed chains of transmission in 2010 in Senegal based upon the close genetic linkage among isolates, although the dates and sources for the importations indicates missed virus transmission somewhere in late 2009 because the initial isolates had less genetic linkage than expected.

Percent of NPAFP cases with unknown age	0.3
Percent of 6-35 month old NPAFP cases with unknown dose history	3.5

Sierra Leone

Total number of states \ provinces: 4

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP 75 % Pol3 74 %

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
1%	Non-adjusted 100% (3 of 3)	% within acceptable range	100% (3 of 3)	
Percent 4+ doses (national)	Percent states with > 80% 4+dos	se NPAFP children		
36%	Non-adjusted 0% (0 of 3)	% within acceptable range	0% (0 of 3)	

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	06-Mar-10	11.4	17.3	25% (1 of 4)	0% (0 of 4)
NID-mOPV1	26-Mar-10	9.4	13.1	50% (2 of 4)	0% (0 of 4)
NID-mOPV1	07-May-10	10.5	14	50% (2 of 4)	0% (0 of 4)
NID-mOPV1	28-May-10	12	14.9	25% (1 of 4)	0% (0 of 4)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	11	5	1	1	28-Feb-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
6.1	Non-adjusted 100% (4 of 4)	% within acceptable range	100% (4 of 4)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
89.4%	Non-adjusted 100% (4 of 4)	% within acceptable range	100% (4 of 4)	

Poliovirus History

The WPV1 viruses in Sierra Leone during 2009 represented a moderate outbreak resulting from importation in the middle of 2009 from Guinea. Only one genetic cluster was observed. The 2009 outbreak was distributed mostly in the western part of the country and included moderate local transmission. The case in 2010 represented continued circulation from 2009 and not a new importation. There was little indication of missed chains of transmission in 2009 based upon the close genetic linkage among isolates, although the 2010 isolate had less genetic linkage than expected.

Data Completeness

Percent of NPAFP cases with unknown age	0.6
Percent of 6-35 month old NPAFP cases with unknown dose history	1.9

Page 31

Somalia

Total number of states \ provinces: 19

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	31%	Pol3	28%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
9%	Non-adjusted	% within acceptable range	
Percent 4+ doses (national)	Percent states with >	> 80% 4+dose NPAFP children	
66%	Non-adjusted	% within acceptable range	

Independent Monitoring

•	•				
		National	indicator	Sub nation	al indicator
Campaign type	Date		sed children narking)	Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house

Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
cVDPV2	4	4			24-Dec-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2		
3.1	Non-adjusted 88% (14 of 16)	% within acceptable range	100% (16 of 16)
% adequate stools (nat.)	Percent states with adequate sto	ool proportion >= 80%	
98.1%	Non-adjusted 100% (1 of 1)	% within acceptable range	100% (1 of 1)

Poliovirus History

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	0

Sudan

Total number of states \ provinces: 25

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	84%	Pol3	84%
D.,	U 4 /U	1 010	0470

Non Polio AFP Profile

Percent 0-dose (national) 4%	Percent states with < 10% 0-dose Non-adjusted 80% (4 of 5)	* NPAFP children % within acceptable range	100% (5 of 5)
Percent 4+ doses (national)	Percent states with > 80% 4+dose	e NPAFP children	
79%	Non-adjusted 60% (3 of 5)	% within acceptable range	80% (4 of 5)

Independent Monitoring

		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house

Independent monitoring data were used to assess the country specific Major Process Indicator. Please refer to the Risk Assessment document, annex-5, for details.

Surveillance

Polio Cases (W1, W3, and VDPVs)

		(Count		
Serotype	2009 (J	an-Dec)	2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	45	24			27-Jun-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2		
3	Non-adjusted 92% (23 of 25)	% within acceptable range	100% (25 of 25)
% adequate stools (nat.)	Percent states with adequate sto	ol proportion >= 80%	
		% within acceptable range	

Poliovirus History

The WPV1 viruses in Sudan during 2009 represented continuation of a large outbreak that began in 2008. Only one genetic cluster was observed. The 2009 outbreak was widely distributed mostly in the southern part of the country and included several cases in the northeast of the country. The outbreak represented continued circulation in the region dating from 2004 and not a new importation into the region. Because of the lack of close genetic linkage, it is not possible to know where the virus was between 2004 and 2008. There was little indication of missed chains of transmission in 2009 based upon the close genetic linkage among isolates.

Percent of NPAFP cases with unknown age	0.2
Percent of 6-35 month old NPAFP cases with unknown dose history	0

Tajikistan

Total number of states \ provinces: 6

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	93%	Pol3	93%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
%	Non-adjusted % within acceptable range		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
76%	Non-adjusted	% within acceptable range	

Independent Monitoring

		National	indicator	Sub nation	al indicator
Campaign type	Date	Percent missed children (finger marking)		Percent of stat missed	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	18-May-10	0.5	0.2	100% (5 of 5)	100% (3 of 3)
NID-mOPV1	01-Jun-10	2.5	0	100% (5 of 5)	100% (2 of 2)
NID-mOPV1	15-Jun-10	3.6	0	100% (5 of 5)	100% (2 of 2)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (Jan-Dec)		2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	0	0	451	35	12-Jun-10

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
7	Non-adjusted 80% (4 of 5)	% within acceptable range	100% (4 of 4)	
	Percent states with adequate stool proportion >= 80%			
% adequate stools (nat.)	Percent states with adequate sto	ol proportion >= 80%		

Poliovirus History

The WPV1 viruses in Tajikistan during 2010 represented a very large outbreak resulting from importation from India. Only one genetic cluster was observed. The outbreak was widely distributed in several parts of the country, with intense transmission particularly in western parts of the country. The virus was related to viruses circulating in western Uttar Pradesh, India during late 2009. Data is not available to analyze the degree of genetic linkage among the isolates within Tajikistan.

Data Completeness

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	63.7

Page 34

Togo

Total number of states \ provinces: 6

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	89%	Pol3	89%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
4%	Non-adjusted % within acceptable range		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
85%	Non-adjusted	% within acceptable range	

Independent Monitoring

•	•				
		National indicator		Sub national indicator	
Campaign type	Date	Percent missed children (finger marking)		Percent of state missed of	
		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	01-Apr-10	4.4	10.8	100% (6 of 6)	67% (4 of 6)
NID-mOPV1	14-May-10	4	10.4	100% (6 of 6)	33% (2 of 6)

Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2009 (Jan-Dec)		2010 (J	an-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	6	5			28-Mar-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.2	Non-adjusted 67% (4 of 6)	% within acceptable range 83% (5 of 6)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
90.6%	Non-adjusted 100% (1 of 1)	% within acceptable range 100% (1 of 1)		

Poliovirus History

The WPV1 viruses in Togo during 2009 represented at least three importations in 2008 and 2009. The viruses are from two genetic clusters, both related to the larger West Africa outbreak that began in 2008. One cluster represented the five cases in the north, while a single isolate of the other cluster was detected in the central part of the country related to the outbreak in Benin. The northern transmission is likely the result of two importations, one from Ghana and the other from Benin, with only limited local transmission. Based upon the close genetic linkage among most of the virus isolates, it is unlikely that there are significant missed chains of transmission, however, two isolates have less genetic linkage than expected, which might be an indication that surveillance may have gaps at the sub-national level.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	15.6

Uganda

Total number of states \ provinces: 79

Immunization

Immunization coverage (2009 nat. WHO-UNICEF estimates)

DTP	64%	Pol3	59%
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Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
11%	Non-adjusted	% within acceptable range	
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
44%	Non-adjusted	% within acceptable range	

Independent Monitoring

-	_				
	National indicator		Sub national indicator		
Campaign type	Date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
		House to House (%)	Out of house (%)	House to House	Out of house

Surveillance

Polio Cases (W1, W3, and VDPVs)

		(Count		
Serotype	2009 (J	an-Dec)	2010 (J	lan-Jun)	Date of onset
	cases	districts	cases	districts	for last case
W1	8	2			10-May-09

Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.8	Non-adjusted 57% (37 of 65)	% within acceptable range	85% (55 of 65)	
% adequate stools (nat.)	adequate stools (nat.) Percent states with adequate stool proportion >= 80%			
88.2%	Non-adjusted 80% (4 of 5)	% within acceptable range	80% (4 of 5)	

Poliovirus History

The WPV1 viruses in Uganda during 2009 represented a focal outbreak resulting from importation in early 2009 from southern Sudan. Only one genetic cluster was observed. The 2009 outbreak was centered in northern Uganda and included limited local transmission. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates.

Percent of NPAFP cases with unknown age	0
Percent of 6-35 month old NPAFP cases with unknown dose history	3.6