# COUNTRY PROFILE SUPPLEMENT

# TO THE

# CDC ASSESSMENT OF RISKS TO THE GLOBAL POLIO ERADICATION INITIATIVE (GPEI) STRATEGIC PLAN 2010-2012

30-Mar-11

2011 First Quarter Report

#### Notes:

Please refer to the CDC Risk Assessment for details on the data sources.

Not all sub national results can be calculated for every country. When calculating the percent of states\province we limited the regions to those meeting the following criteria:

- Percent 0-dose and 4+ doses: states\prov. with  $\geq$  15 NPAFP cases, and a population of  $\geq$  100,000 under 15 year old children
- NPAFP rate: states\prov. with a population of  $\geq 100,000$  under 15 year old children
- Adequate stool: all states\prov. with at least 1 AFP case

Absence of independent monitoring data does not always indicate monitoring was not done; rather the data were not available at the time of this report. For countries such as Afghanistan, Pakistan, and Sudan the region shared limited IM data specific for the Major Process Indicators, these data are not shown here. Not all of the rounds, start dates, and antigens could be verified.

Case data as of 22 March 2011.

## **Afghanistan**

Total number of states \ provinces: 32

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 83% Pol 83%

# Non Polio AFP Profile

Percent 0-dose (national) 1.2%	Percent states with < 10% 0-dose NPAFP children  Non-adjusted 100% (18 of 18) % within acceptable range 100% (18 of 18)				
Percent 4+ doses (national)	Percent states with > 80% 4+dose	e NPAFP children			
92.2%	Non-adjusted 83.3% (15 of 18)	% within acceptable range	83.3% (15 of 18)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	l indicator	Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-bOPV	14-Mar-10				
NID-tOPV	03-May-10				
SNID-mOPV1	01-Jun-10				
SNID-bOPV	29-Jun-10				
SNID-bOPV	25-Jul-10				
SNID-mOPV1	05-Sep-10				
NID-bOPV	03-Oct-10				
NID-tOPV	07-Nov-10				
SNID-bOPV	12-Dec-10				
SNID-bOPV	30-Jan-11				

## Surveillance

Polio Cases (W1, W3, and VDPVs)

		Count				
Serotype	otype 2010 (Jan-Dec) 2011 (Jan-present)		Date of onset for			
	cases	districts	cases	districts	last case	
W1	17	11	1	1	11-Jan-11	
W3	8	6	0	0	11-Apr-10	
cVDPV 2	4	1	1	1	11-Jan-11	

#### Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >	>= 2	
8.8	Non-adjusted 100% (31 of 31)	% within acceptable range	100% (31 of 31)
% adequate stools (nat.)	Percent states with adequate sto	ol proportion >= 80%	
93.4%	Non-adjusted 96.9% (31 of 32)	% within acceptable range	100% (32 of 32)
Percent of population <15 y	ears of age living in states / prov. who	ere both surveillance indicato	rs are met <b>95.2%</b>

#### Poliovirus History

The WPV1 viruses in Afghanistan for 2010 represent an evolving transmission pattern. There were viruses from 3 genetic clusters isolated in 2010 and represent both a new importation from Pakistan and continued circulation of two clusters in the south. One of these clusters represents low-level indigenous transmission and is 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 cross-border transmission with Pakistan in Kandahar province.

The WPV3 viruses in 2010 are from two genetic clusters. One represents continued circulation of the same cluster seen in 2009 and 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. This cluster also includes a likely importation from Pakistan of a different chain of transmission. The new cluster observed

# **Afghanistan**

Total number of states \ provinces: 32

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 missed transmission, which is an indication that surveillance has gaps at the subnational level.

# **Data Completeness**

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) DTP3 73% Pol 73%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
11.2%	Non-adjusted 100% (3 of 3)	% within acceptable range	100% (3 of 3)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
31.8%	Non-adjusted 0% (0 of 3)	% within acceptable range	0% (0 of 3)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		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)
Mop up-OPVm1	17-Jul-10				
NID-bOPV	06-Aug-10	12.5	13.9	54% (7 of 13)	50% (6 of 12)
NID-bOPV	13-Aug-10	16.9	17.4	50% (1 of 2)	50% (1 of 2)
NID-bOPV	01-Oct-10	7.6	9.7	88% (15 of 17)	82% (14 of 17)
NID-mOPV1	29-Oct-10	9	9.9	72% (13 of 18)	67% (12 of 18)
Mop up-mOPV1	12-Nov-10				
SNID-mOPV1	03-Dec-10				
Mop up-mOPV1	14-Jan-11				
SNID-mOPV1	25-Feb-11	6.7	7.5	100% (6 of 6)	83% (5 of 6)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	33	18	2	1	04-Feb-11

#### Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
3.1	Non-adjusted 88.9% (16 of 18) % within acceptable range 100% (18 of 18)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
87.8%	Non-adjusted 88.9% (16 of 18) % within acceptable range 100% (18 of 18)			

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 70.9%

# Poliovirus History

The WPV1 viruses in Angola during 2010 represented a continuing outbreak resulting from importation from India in 2007. Only one genetic cluster has been observed. 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. Based upon multiple isolates from 2010 with less genetic linkage than expected, there is indication that surveillance may have gaps at the sub-national level.

Angola Total number of states \ provinces: 18

Data Completeness

Percent of NPAFP cases with unknown age

**Benin** 

Total number of states \ provinces: 12

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 83% Pol 83%

Non Polio AFP Profile

Percent 0-dose (national) 9.5%	Percent states with < 10% 0-dose NPAFP children  Non-adjusted 0% (0 of 0) % within acceptable range 0% (0 of 0)				
Percent 4+ doses (national)	Percent states with > 80% 4+dos	e NPAFP children			
47.6%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-bOPV	24-Apr-10	2.9	6.9	100% (12 of 12)	67% (6 of 9)
NID-bOPV	19-Nov-10	2.9		100% (12 of 12)	
NID-bOPV	17-Dec-10	3	32.9	92% (11 of 12)	29% (2 of 7)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (Jan-Dec) 2011 (Jan-present)			Date of onset for
	cases districts cases districts		last case	

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
2.4	Non-adjusted 58.3% (7 of 12)	% within acceptable range	83.3% (10 of 12)	
% adequate stools (nat.)	Percent states with adequate stoc	ol proportion >= 80%		
90.6%	Non-adjusted 83.3% (10 of 12)	% within acceptable range	91.7% (11 of 12)	

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 51.8%

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

# **Data Completeness**

Percent of NPAFP cases with unknown age

0%	
9.5%	

# **Burkina Faso**

Total number of states \ provinces: 13

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 82% Pol 84%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
1.3%	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			
82.7%	Non-adjusted 100% (1 of 1)	% within acceptable range	100% (1 of 1)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of state missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	02-Apr-10	2.7		100% (13 of 13)	
NID-mOPV1	07-May-10	2.8	15.5	100% (13 of 13)	23% (3 of 13)
SNID-mOPV1	28-May-10	1.2	5.8	100% (7 of 7)	100% (7 of 7)
SNID-mOPV1	02-Jul-10	1.6	4.4	100% (7 of 7)	100% (7 of 7)
NID-bOPV	11-Nov-10	1.8	9.2	100% (13 of 13)	62% (8 of 13)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >	<b>&gt;=</b> 2	
3.1	Non-adjusted 76.9% (10 of 13)	% within acceptable range	100% (13 of 13)
% adequate stools (nat.)	Percent states with adequate stoo	ol proportion >= 80%	
88.2%	Non-adjusted 84.6% (11 of 13)	% within acceptable range	100% (13 of 13)
Percent of population <15 y	ears of age living in states / prov. whe	ere both surveillance indicato	rs are met <b>67.8%</b>

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

# **Data Completeness**

Percent of NPAFP cases with unknown age

0.9%	
12%	

# Burundi

Total number of states \ provinces: 17

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 92% Pol 96%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
0%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)	
Percent 4+ doses (national)	Percent states with > 80% 4+dos	se NPAFP children		
8.5%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date		sed children narking)	Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >=	Percent states with NPAFP rate >= 2			
2.8	Non-adjusted 41.2% (7 of 17)	% within acceptable range	76.5% (13 of 17)		
% adequate stools (nat.)	Percent states with adequate stool	Percent states with adequate stool proportion >= 80%			
86.2%	Non-adjusted 68.8% (11 of 16)	% within acceptable range	87.5% (14 of 16)		
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 45.5%					

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

Percent of NPAFP cases with unknown age

0.9%	
14.9%	

# Cameroon

Total number of states \ provinces: 10

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 80% Pol 79%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
8.5%	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				
37.8%	Non-adjusted 0% (0 of 1)	% within acceptable range	0% (0 of 1)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator				Sub nation	Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed				
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house			
SNID-mOPV3	23-Apr-10	7.8	11.7	75% (3 of 4)	50% (2 of 4)			
SNID-mOPV1	23-Jul-10	2.9	6	100% (1 of 1)	100% (1 of 1)			
SNID-mOPV1	06-Aug-10	4.4	7.1	100% (1 of 1)	100% (1 of 1)			
SNID-bOPV	28-Nov-10							

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (Jan-Dec)		2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2					
2.1	Non-adjusted 50% (5 of 10)	% within acceptable range	60% (6 of 10)			
% adequate stools (nat.)	Percent states with adequate st	Percent states with adequate stool proportion >= 80%				
82.1%	Non-adjusted 60% (6 of 10)	% within acceptable range	90% (9 of 10)			
Demonstration of the African of the Historia state / second back and bath and indicates an early of the						

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 25.8%

## Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

# **Central African Republic**

Total number of states \ provinces: 7

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 54% Pol 47%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
3%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
28.4%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date Percent missed children (finger marking) Percent of states with missed children				
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV3	23-Apr-10	10.1	10.2	50% (3 of 6)	50% (3 of 6)
NID-bOPV	02-Nov-10	12.1	15.9	40% (2 of 5)	0% (0 of 5)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (Jan-Dec)		2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2					
6.9	Non-adjusted 100% (6 of 6)	% within acceptable range	100% (6 of 6)			
% adequate stools (nat.)	Percent states with adequate sto	Percent states with adequate stool proportion >= 80%				
90.8%	Non-adjusted 85.7% (6 of 7)	% within acceptable range	100% (7 of 7)			
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 86.9%						

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

Percent of NPAFP cases with unknown age

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

0%	
29.9%	

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Chad

Total number of states \ provinces: 18

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 23% Pol 36%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
7.6%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
58.2%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

			National indicator		al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	00 11.11.
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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)
SNID-mOPV1	26-Jul-10				
SNID-mOPV3	30-Aug-10	11.2	26.7	50% (1 of 2)	0% (0 of 1)
SNID-bOPV	06-Sep-10	12.6	12.8	0% (0 of 2)	0% (0 of 2)
SNID-bOPV	14-Sep-10	15.4	17.8	0% (0 of 1)	0% (0 of 1)
NID-bOPV	29-Oct-10	13.6	30.2	62% (5 of 8)	38% (3 of 8)
SNID-bOPV	27-Nov-10	9.7	17	100% (1 of 1)	0% (0 of 1)
SNID-bOPV	10-Dec-10	9	14.2	88% (7 of 8)	12% (1 of 8)
SNID-bOPV	20-Jan-11	8.1	9.3	67% (6 of 9)	56% (5 of 9)
NID-bOPV	18-Feb-11	7.7	10.7	80% (8 of 10)	60% (6 of 10)

## Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (Jan-Dec) 2011 (Jan-present)		Date of onset for		
	cases	districts	cases	districts	last case
W1	11	6	14	5	20-Feb-11
W3	15	10	2	1	16-Feb-11
cVDPV 2	1	1	0	0	10-Nov-10

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
4.1	Non-adjusted 94.1% (16 of 17)	% within acceptable range	100% (17 of 17)		
% adequate stools (nat.)	Percent states with adequate sto	Percent states with adequate stool proportion >= 80%			
79%	Non-adjusted 50% (9 of 18) % within acceptable range 77.8% (14 of 18)				
	+				

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 54.3%

## Poliovirus History

The WPV3 viruses in Chad during 2010 represented continuation of a large widespread outbreak resulting from importation in 2007. 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. Based upon several isolates with less genetic linkage than expected, there is some indication that surveillance may have gaps at the sub-national level.

Chad Total number of states \ provinces: 18

**Data Completeness** 

Percent of NPAFP cases with unknown age

Congo

Total number of states \ provinces: 11

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 91% Pol 91%

Non Polio AFP Profile

Percent 0-dose (national) 8.9%	Percent states with < 10% 0-dose NPAFP children  Non-adjusted 0% (0 of 1) % within acceptable range 100% (1 of 1)				
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
21.4%	Non-adjusted 0% (0 of 1)	% within acceptable range	0% (0 of 1)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	03-Dec-10				
NID-bOPV	11-Jan-11				
NID-bOPV	22-Feb-11				

## Surveillance

Polio Cases (W1, W3, and VDPVs)

Count					
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	66	13	1	1	22-Jan-11

Not currently reflected in the table are 317 AFP cases with inadequate specimens that have been exceptionally classified as confirmed polio based on their association with the WPV1 outbreak.

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
7.9 *	Non-adjusted 80% (4 of 5) % within acceptable range 100% (5 of 5)				
% adequate stools (nat.)	Percent states with adequate stoo	ol proportion >= 80%			
23.6%	Non-adjusted 45.4% (5 of 11)	% within acceptable range	54.6% (6 of 11)		

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 15.1%

## Poliovirus History

The very large WPV1 outbreak in 2010 appears to have been the result of a single importation event into Congo from Angola, and not related to the ongoing outbreak in DRC. Because of the remarkably large percentage of cases without specimens, it is not possible to draw inference from the genetic linkage of isolates about surveillance sensitivity, but the circumstances of extremely poor specimen collection assure some degree of compromised virologic surveillance and provide little evidence that the end of the outbreak can be determined.

#### **Data Completeness**

Percent of NPAFP cases with unknown age

1%
33.9%

<sup>\*</sup> Incorrect value - 317 cases incorrectly classified as NPAFP

# Côte d'Ivoire

Total number of states \ provinces: 19

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) 81% Pol 77%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children					
2.3%	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					
33.6%	Non-adjusted 0% (0 of 1)	% within acceptable range	0% (0 of 1)			

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		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)
NID-mOPV1	26-Oct-10	2.2	5.1	100% (19 of 19)	84% (16 of 19)
SNID-mOPV1	26-Nov-10				

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (Jan-Dec) 2011 (Jan-present)		Date of onset for		
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >	>= 2	
2.9	Non-adjusted 73.7% (14 of 19)	% within acceptable range	100% (19 of 19)
% adequate stools (nat.)	Percent states with adequate stoo	ol proportion >= 80%	
82%	Non-adjusted 63.2% (12 of 19)	% within acceptable range	84.2% (16 of 19)
Percent of population <15 y	ears of age living in states / prov. who	ere both surveillance indicato	rs are met <b>53.2%</b>

## Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

0.4% Percent of NPAFP cases with unknown age

## **Democratic Republic of Congo**

Total number of states \ provinces: 11

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 77% Pol 74%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children					
11.4%	Non-adjusted 54.6% (6 of 11) % within acceptable range 54.6% (6 of 11)					
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children					
28.5%	Non-adjusted 0% (0 of 11)	% within acceptable range	0% (0 of 11)			

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		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)
SNID-mOPV1	19-Aug-10	13.9	11.7	43% (3 of 7)	29% (2 of 7)
SNID-mOPV1	23-Sep-10	9.7	16.3	56% (5 of 9)	33% (3 of 9)
SNID-mOPV1	28-Oct-10	6.8	11.1	100% (9 of 9)	56% (5 of 9)
SNID-mOPV1	12-Nov-10	3.8	8.4	100% (1 of 1)	100% (1 of 1)
SNID-mOPV1	25-Nov-10	5.1	7.8	88% (7 of 8)	62% (5 of 8)
SNID-mOPV1	20-Jan-11	9.1	6.1	50% (1 of 2)	100% (2 of 2)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (Jan-Dec)		2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case
W1	100	32	22	17	27-Feb-11
cVDPV 2	14	10	0	0	13-Oct-10

## Non Polio AFP data

Percent states with NPAFP rate >= 2			
Non-adjusted 100% (11 of 11) % within acceptable range 100% (11 of 11)			
Percent states with adequate stool proportion >= 80%			
Non-adjusted 18.2% (2 of 11) % within acceptable range 45.4% (5 of 11)			

## Poliovirus History

The WPV1 viruses detected in 2010 represented at least five new importation events from Angola, with significant local circulation. In addition, five WPV1 cases represent 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 main Kasai Occidental/Bandundu WPV1 viruses based upon the close genetic linkage among isolates; however, the large genetic distance of the Katanga virus indicates a significant surveillance gap, likely somewhere in eastern DRC.

#### **Data Completeness**

Percent of NPAFP cases with unknown age

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

0.1% 10.8%

# **Eritrea**

Total number of states \ provinces: 6

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 99% Pol 99%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
0%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)	
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children			
6.2%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (Jan-Dec)		2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
4.8	Non-adjusted 75% (3 of 4)	% within acceptable range	100% (4 of 4)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
96.8%	Non-adjusted 83.3% (5 of 6)	% within acceptable range	100% (6 of 6)		

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

Percent of NPAFP cases with unknown age

0%	
6.2%	

# **Ethiopia**

Total number of states \ provinces: 11

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 79% Pol 76%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children		
7.5%	Non-adjusted 57.1% (4 of 7)	% within acceptable range	71.4% (5 of 7)
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
24.9%	Non-adjusted 0% (0 of 7)	% within acceptable range	0% (0 of 7)

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

			National indicator		al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		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)
SNID-tOPV	05-Aug-10	8.4	10.8	100% (3 of 3)	67% (2 of 3)
SNID-tOPV	17-Sep-10	10.2	21.3	0% (0 of 1)	0% (0 of 1)
CHD-tOPV	22-Oct-10				
CHD-tOPV	22-Feb-11				

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (Jan-Dec)		2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case
cVDPV 3	6	3	0	0	04-Nov-10

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
2.7	Non-adjusted 90% (9 of 10)	% within acceptable range	90% (9 of 10)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
78.1%	Non-adjusted 27.3% (3 of 11)	% within acceptable range	81.8% (9 of 11)		
Percent of population <15 v	Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 29.9%				

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

# **Data Completeness**

Percent of NPAFP cases with unknown age

0%	
5.6%	

Gabon

Total number of states \ provinces: 10

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 45% Pol 44%

# Non Polio AFP Profile

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

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator	
Campaign type	Start date	Percent missed children (finger marking)				
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house	
NID-mOPV1	27-Jan-11	21.4	23.8	0% (0 of 2)	0% (0 of 2)	

## Surveillance

Polio Cases (W1, W3, and VDPVs)

		Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for	
	cases	districts	cases	districts	last case	
W1	0	0	1	1	15-Jan-11	

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate	>= 2	
3.5	Non-adjusted 50% (1 of 2)	% within acceptable range	100% (2 of 2)
% adequate stools (nat.)	Percent states with adequate st	ool proportion >= 80%	
48.4%	Non-adjusted 20% (2 of 10)	% within acceptable range	30% (3 of 10)

## Poliovirus History

Gabon was polio-free until a single reported case in early 2011 that represents an importation from the large outbreak in Republic of Congo. With a single case in Gabon, there is insufficient virologic data to inform an assessment of surveillance sensitivity in Gabon; however, there is close genetic linkage between the Gabon virus and a Republic of Congo virus.

# **Data Completeness**

Percent of NPAFP cases with unknown age

0%
9.1%

## Gambia

Total number of states \ provinces: 6

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 98% Pol 97%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
0%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
90.9%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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)
NID-mOPV1	28-Oct-10	1.5	7.6	100% (6 of 6)	50% (3 of 6)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

## Non Polio AFP data

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

## Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

Ghana

Total number of states \ provinces: 10

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) 94% Pol 94%

Non Polio AFP Profile

Percent 0-dose (national) 0%	Percent states with < 10% 0-dos Non-adjusted 0% (0 of 0)	e NPAFP children % within acceptable range	0% (0 of 0)
Percent 4+ doses (national)	Percent states with > 80% 4+dos	se NPAFP children	
64.3%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator	
Campaign type	Start date	Percent missed children (finger marking)				
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house	
NID-mOPV1	23-Apr-10	4.8	2.7	100% (10 of 10)	90% (9 of 10)	

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (Jan-Dec)		2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
1.6	Non-adjusted 40% (4 of 10)	% within acceptable range 60% (6 of 10)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
80.3%	Non-adjusted 70% (7 of 10)	% within acceptable range 90% (9 of 10)		

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

# **Data Completeness**

Percent of NPAFP cases with u

Percent of NPAFP cases with unknown age	0.6%
Percent of 6-35 month old NPAFP cases with unknown dose history	3.6%

# Guinea

Total number of states \ provinces: 8

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 57% Pol 53%

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+dose NPAFP children			
56.7%	Non-adjusted 0% (0 of 1)	% within acceptable range	100% (1 of 1)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator  Percent missed children (finger marking)		Sub national indicator	
Campaign type	Start date			Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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)
NID-mOPV1	05-Jul-10	0.2	1.8	100% (8 of 8)	100% (8 of 8)
NID-mOPV1	28-Oct-10	0.1	2.1	100% (8 of 8)	100% (8 of 8)
SNID-mOPV1	15-Nov-10				
SNID-mOPV1	11-Dec-10				
SNID-mOPV1	17-Jan-11				

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate	>= 2			
4.3	Non-adjusted 100% (8 of 8)	% within acceptable range	100% (8 of 8)		
% adequate stools (nat.)	Percent states with adequate sto	ool proportion >= 80%			
68.6%	Non-adjusted 12.5% (1 of 8)	% within acceptable range	37.5% (3 of 8)		
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 10.5%					

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

# **Data Completeness**

Percent of NPAFP cases with unknown age

0.5%
10%

# Guinea-Bissau

Total number of states \ provinces: 9

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 68% Pol 72%

Non Polio AFP Profile

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

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	24-Apr-10	2.7	5	100% (7 of 7)	57% (4 of 7)
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	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
1.6	Non-adjusted 50% (1 of 2)	% within acceptable range 50% (1 of 2)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
66.7%	Non-adjusted 25% (1 of 4)	% within acceptable range 75% (3 of 4)		

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

Percent of NPAFP cases with unknown age

11.1% 0%

India

Total number of states \ provinces: 35

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 66% Pol 67%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
0.2%	Non-adjusted 100% (21 of 21)	% within acceptable range	100% (21 of 21)	
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children			
96.7%	Non-adjusted 100% (21 of 21)	% within acceptable range	100% (21 of 21)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub national indicator  Percent of states with < 10% missed children	
Campaign type	Start date		sed children marking)		
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
SNID-mOPV1	14-Mar-10				
SNID-mOPV1, b	25-Apr-10				
SNID-mOPV1, b	23-May-10				
SNID-mOPV1, b	13-Jun-10				
SNID-mOPV1, b	27-Jun-10				
SNID-bOPV, 1, 3	18-Jul-10				
SNID-bOPV	08-Aug-10				
SNID-mOPV1	04-Sep-10				
SNID-mOPV1, b	19-Sep-10				
SNID-mOPV1	04-Oct-10				
SNID-bOPV, 1, 3	24-Oct-10				
SNID-mOPV1, b	14-Nov-10				
SNID-mOPV1, b	19-Dec-10				
NID-bOPV, t	23-Jan-11				
Mop up-bOPV	13-Feb-11				
NID-bOPV, t	27-Feb-11				

## Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	18	7	1	1	13-Jan-11
W3	24	12	0	0	22-Oct-10

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
12.3	Non-adjusted <b>94.1% (32 of 34)</b> % within acceptable range <b>94.1% (32 of 34)</b>				
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
83.4%	Non-adjusted 82.4% (28 of 34) % within acceptable range 91.2% (31 of 34)				
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 82.9%					

# Poliovirus History

The WPV1 virus in India during 2010 represent an improving situation of endemic transmission. No WPV1 with genetic links to viruses from Uttar Pradesh have been isolated in India during 2010, All cases from 2010 in five different states, and including two instances of international spread to Nepal were related to virus last observed in

India Total number of states \ provinces: 35

Bihar. In several instances, limited local transmission was observed following these importations. The last cases observed in Bihar were associated with a cross-border outbreak with Nepal.

The number of WPV3 cases in India during 2010 was reduced considerably and viruses from only four genetic clusters have been observed. These included both continued transmission in UP and Bihar, but also new importation events into three states with local transmission in a neighboring state.

Based upon the close genetic linkage among many of the virus isolates and environmental surveillance, 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, which appears to be the source of most viruses from other states based on the genetics.

## **Data Completeness**

Percent of NPAFP cases with unknown age	0%
Percent of 6-35 month old NPAFP cases with unknown dose history	0.5%

## Kazakhstan

Total number of states \ provinces: 16

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) 98% Pol 99%

# 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+dose NPAFP children				
37%	Non-adjusted 0% (0 of 1)	% within acceptable range	0% (0 of 1)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub nation	al indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent missed children Percent of states w		
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house	
NID-OPVt	06-Sep-10					
SNID-OPVm1	01-Nov-10					
SNID-OPVm1	28-Nov-10					
SNID-OPVm1	21-Feb-11					

#### Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	1	1	0	0	12-Aug-10

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2					
3.2	Non-adjusted 73.3% (11 of 15)	% within acceptable range	93.3% (14 of 15)			
% adequate stools (nat.)	Percent states with adequate stor	Percent states with adequate stool proportion >= 80%				
99%	Non-adjusted 100% (16 of 16)	% within acceptable range	100% (16 of 16)			

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 77.2%

## Poliovirus History

Kazakhstan was polio-free until a single reported case in 2010 that represents an importation from the outbreak in Tajikistan. With only a single case in Kazakhstan and incomplete data from Tajikistan there is insufficient virologic data to inform an assessment of surveillance sensitivity in Kazakhstan.

# **Data Completeness**

Percent of NPAFP cases with unknown age 0% 2.2%

Kenya

Total number of states \ provinces: 8

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) 75% Pol 71%

Non Polio AFP Profile

Percent 0-dose (national) 5.2%	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+dos	e NPAFP children			
33.3%	Non-adjusted 0% (0 of 5)	% within acceptable range	0% (0 of 5)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
SNID-mOPV1	20-Nov-10	20.3	22.9	0% (0 of 3)	0% (0 of 3)
SNID-mOPV1	11-Dec-10	10.4	19.4	67% (2 of 3)	0% (0 of 3)
SNID-mOPV1	15-Jan-11	7	14.2	100% (3 of 3)	0% (0 of 3)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate	? >= 2			
2.1	Non-adjusted 50% (4 of 8)	% within acceptable range	87.5% (7 of 8)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
88.7%	Non-adjusted 100% (8 of 8)	% within acceptable range	100% (8 of 8)		
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 36%					

# Poliovirus History

Although no WPV1 viruses were detected in Kenya during 2010, the outbreak in Uganda in 2010 is most closely linked to a 2009 Kenya virus with a significant genetic gap from 2009 isolates. Without viruses, there is insufficient information to inform an assessment of surveillance sensitivity in Kenya in 2010, however, the missed virus transmission from 2009 represents some concern for surveillance quality in the border area shared with Uganda.

# **Data Completeness**

Percent of NPAFP cases with unknown age

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

0% 13.3%

## Liberia

Total number of states \ provinces: 15

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 64% Pol 74%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
0%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
39.1%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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)
NID-bOPV	29-Oct-10	5.3	4.6	93% (13 of 14)	93% (13 of 14)
NID-mOPV1	25-Nov-10	4.7	6.3	100% (15 of 15)	87% (13 of 15)
NID-mOPV1	16-Dec-10	6.4	8.2	80% (12 of 15)	73% (11 of 15)

## Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	2	2	0	0	08-Sep-10

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >=	= 2	
2.9	Non-adjusted 60% (3 of 5)	% within acceptable range	80% (4 of 5)
% adequate stools (nat.)	Percent states with adequate stool	proportion >= 80%	
98%	Non-adjusted 92.9% (13 of 14)	% within acceptable range	100% (14 of 14)

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 46.1%

# Poliovirus History

The two WPV1 cases in 2010 represented a new importation event likely from Guinea 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 isolates have less genetic linkage than expected both between them and with potential sources in Guinea.

## **Data Completeness**

Percent of NPAFP cases with unknown age

0% 8.7%

Mali

Total number of states \ provinces: 9

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 74% Pol 74%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose	e NPAFP children			
1.9%	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				
69.8%	Non-adjusted 0% (0 of 1)	% within acceptable range	0% (0 of 1)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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)
Mop up-OPVm1	30-Jul-10				
NID-mOPV1	28-Oct-10	6.3	5.4	78% (7 of 9)	89% (8 of 9)
NID-bOPV	25-Nov-10	4.7	6.9	67% (2 of 3)	67% (2 of 3)
Mop up-mOPV3	16-Dec-10				

## Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	3	3	0	0	01-May-10
W3	1	1	0	0	17-Sep-10

# Non Polio AFP data

lon-adjusted 50% (4 of 8)	% within acceptable range 75% (6 of	8)	
Percent states with adequate stool proportion >= 80%			
lon-adjusted 88.9% (8 of 9)	% within acceptable range 100% (9 o	f 9)	
9	ercent states with adequate stoc	ercent states with adequate stool proportion >= 80%	

# Poliovirus History

The three WPV1 viruses detected in 2010 represent both a single case from continued transmission from the importation late in 2009, as well as two independent importations from Burkina Faso and Mauritania. The WPV3 in 2010 represents a new importation event most closely linked to a Niger virus. There is little evidence of significant local transmission. There was little indication of missed chains of transmission based upon the close genetic linkage among most isolates, although one of the 2010 isolates had less genetic linkage than expected. Although having less genetic linkage than expected, as a single case, the WPV3 virus is insufficient to inform an assessment of surveillance sensitivity.

# **Data Completeness**

Percent of NPAFP cases with unknown age

0.7%	
7.5%	

## Mauritania

Total number of states \ provinces: 13

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 64% Pol 63%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dos	e NPAFP children			
6.9%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
79.3%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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)
Mop up-mOPV1	30-Jul-10				
NID-mOPV1	28-Oct-10	7.1	10.1	85% (11 of 13)	69% (9 of 13)

#### Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	5	4	0	0	28-Apr-10

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
5.5	Non-adjusted 100% (6 of 6) % within acceptable range 100% (6 of 6)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
96.9%	Non-adjusted 91.7% (11 of 12) % within acceptable range 100% (12 of 12)			

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 89.1%

# Poliovirus History

The WPV1 viruses in Mauritania 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.

# **Data Completeness**

Percent of NPAFP cases with unknown age

0%

Nepal

Total number of states \ provinces: 5

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 82% Pol 82%

# 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+dos	e NPAFP children			
90.8%	Non-adjusted 100% (4 of 4)	% within acceptable range	100% (4 of 4)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of state missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-bOPV	10-Apr-10				
NID-bOPV	15-May-10				
SNID-mOPV1	19-Jun-10				
Mop-up-mOPV1	19-Jun-10	12	30.2	60% (3 of 5)	0% (0 of 5)
Mop-up-mOPV1	17-Jul-10	10.1	16.7	50% (1 of 2)	0% (0 of 2)
Mop-up-mOPV1	31-Jul-10	7.4	7.9	100% (2 of 2)	100% (2 of 2)
Mop-up-mOPV1	14-Aug-10	10.4	9.2	50% (1 of 2)	50% (1 of 2)
Mop-up-mOPV1	18-Sep-10	5.6	7.8	100% (2 of 2)	50% (1 of 2)
Mop-up-mOPV1	02-Oct-10	5.9	8.2	100% (1 of 1)	100% (1 of 1)
Mop-up-mOPV1	30-Oct-10	4.8	6.6	100% (1 of 1)	100% (1 of 1)
Mop-up-mOPV1	20-Nov-10	5.6	4.8	100% (1 of 1)	100% (1 of 1)
NID-bOPV	12-Feb-11				

## Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	6	2	0	0	30-Aug-10

#### Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2					
5.2	Non-adjusted 100% (5 of 5)	% within acceptable range	100% (5 of 5)			
% adequate stools (nat.)	Percent states with adequate st	ool proportion >= 80%				
88.1%	Non-adjusted 80% (4 of 5) % within acceptable range 100% (5 of 5)					
	-					

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 89.9%

## 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 five cases and 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%

Nepal	Total number of states \ provinces:	5
Percent of 6-35 month old NPAFP cases with unknown dose history	1.8%	

Niger

Total number of states \ provinces: 8

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 70% Pol 71%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
2.2%	Non-adjusted 100% (4 of 4)	% within acceptable range	100% (4 of 4)	
Percent 4+ doses (national)	Percent states with > 80% 4+dos	e NPAFP children		
64.8%	Non-adjusted 0% (0 of 4)	% within acceptable range	25% (1 of 4)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		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)
SNID-bOPV	01-Nov-10	1.4	4.5	100% (3 of 3)	67% (2 of 3)
NID-bOPV	14-Jan-11	3.1	7.6	100% (8 of 8)	88% (7 of 8)

## Surveillance

Polio Cases (W1, W3, and VDPVs)

		Count			
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W3	2	1	1	1	19-Jan-11
cVDPV 2	1	1	0	0	01-Jun-10

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
4.4	Non-adjusted 87.5% (7 of 8)	% within acceptable range	87.5% (7 of 8)		
% adequate stools (nat.)	Percent states with adequate sto	ool proportion >= 80%			
73.5%	Non-adjusted 37.5% (3 of 8)	% within acceptable range	62.5% (5 of 8)		

# Poliovirus History

The WPV3 viruses in Niger detected in 2010 represent a single new importation from Nigeria. There is little evidence of significant local transmission and little indication of missed chains of transmission based upon the close genetic linkage among isolates, although the earliest 2010 WPV3 isolate had significantly less genetic linkage than expected. The WPV3 virus in Mali with less genetic linkage than expected is related to the WPV3 importation to Niger in 2010, both of which are related to virus from Northern Nigeria in 2010.

# **Data Completeness**

Percent of NPAFP cases with unknown age

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

2.7%

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Nigeria

Total number of states \ provinces: 37

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 42% Pol 54%

## Non Polio AFP Profile

Percent 0-dose (national) 3%	Percent states with < 10% 0-dose NPAFP children Non-adjusted 94.6% (35 of 37) % within acceptable range 97.3% (36 of 37)				
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
67.3%	Non-adjusted 43.2% (16 of 37)	% within acceptable range	46% (17 of 37)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

			National indicator		al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
SNID-bOPV, 1, 3	24-Apr-10				
SNID-bOPV, 3	05-Jun-10				
SNID-OPVb	18-Jun-10				
Mop up-OPVm1	15-Jul-10				
SNID-bOPV, 3, t	05-Aug-10				
SNID-bOPV	18-Sep-10				
SNID-bOPV	23-Oct-10				
NID-bOPV, t	26-Jan-11				
NID-tOPV	23-Feb-11				

## Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2010 (J	an-Dec)	2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case
W1	8	8	2	2	24-Feb-11
W3	13	13	0	0	08-Dec-10
cVDPV 2	27	24	4	4	15-Feb-11

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
7.8	Non-adjusted 100% (37 of 37) % within acceptable range 100% (37 of 37)				
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
93.4%	Non-adjusted 100% (37 of 37) % within acceptable range 100% (37 of 37)				

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 100%

# Poliovirus History

The WPV1 virus in Nigeria during 2010 represents the continued transmission from the very large outbreak in 2008. The genetic diversity of the WPV1 virus chains of transmission has decreased substantially in 2010. Despite the small number of cases, however, a very large proportion of these isolates had much less genetic linkage than expected, and all three genetic clusters observed in 2010 were not observed in the last half of 2009.

The WPV3 viruses in Nigeria during 2010 represent continuation of a large, widespread outbreak in 2009. The genetic diversity of the WPV3 virus chains of transmission in 2010 was reduced along with the number of cases; however, one of the three genetic clusters observed in 2010 had been observed in the second half of 2009. A significant proportion of WPV3 cases in 2010 had much less genetic linkage than expected.

Based upon the significant proportion of isolates with much less genetic linkage than expected, during 2010, including the cVDPV2 isolates, there is the potential for significant surveillance gaps at the sub-national level.

# Nigeria Total number of states \ provinces: 37

# **Data Completeness**

Percent of NPAFP cases with unknown age

0%				
1	1.1%			

**Pakistan** 

Total number of states \ provinces: 7

#### **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 85% Pol 85%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
1.8%	Non-adjusted 80% (4 of 5)	% within acceptable range	80% (4 of 5)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
94.9%	Non-adjusted 80% (4 of 5)	% within acceptable range	80% (4 of 5)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	l indicator	Sub nationa	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of state missed of	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
SNID-OPVb	15-Mar-10				
NID-OPVt	26-Apr-10				
SNID-OPVb	24-May-10				
SNID-OPVm1	14-Jun-10				
NID-OPVb	12-Jul-10				
Mop up-OPVb	05-Aug-10				
Mop up-OPVt	17-Aug-10				
CHD-OPVm1	15-Sep-10				
SNID-bOPV, t	27-Sep-10				
NID-bOPV, t	08-Nov-10				
NID-OPVb	28-Dec-10				
SNID-OPVb	31-Jan-11				
NID-OPVt	07-Mar-11				

## Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	120	34	20	11	06-Mar-11
W3	24	12	0	0	18-Nov-10

# Non Polio AFP data

adjusted 100% (8 d	of 0) 0/ within accomtable range	4000/ (0 60)		
aajastsa 10070 (0 t	of 8) % within acceptable range	100% (8 of 8)		
Percent states with adequate stool proportion >= 80%				
adjusted 100% (8 d	of 8) % within acceptable range	100% (8 of 8)		
		ent states with adequate stool proportion >= 80% adjusted 100% (8 of 8) % within acceptable range		

# Poliovirus History

The WPV1 viruses in Pakistan during 2010 represent a complex pattern of endemic transmission. In 2010, the viruses were from five genetic clusters. Almost all of the isolates are from two clusters, one with mostly local transmission in KP/FATA and the second with additional chains of transmission in the south. Three of of the clusters 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 that 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. The few viruses from Punjab, however, represented residual circulation from two genetic clusters seen in

**Pakistan** 

Total number of states \ provinces: 7

2009.

The WPV3 virus in Pakistan during 2010 represent a somewhat improving situation of endemic transmission. All but one of the WPV3 cases were from a single genetic cluster with multiple chains of transmission correlated with at least three geographic areas in three provinces. The remaining cluster was represented by a single isolate in NWFP. In all instances, there is evidence of only local transmission with the exception of some isolates in Baluchistan that may represent cross-border transmission.

Based upon the close genetic linkage among many of the virus isolates in 2010, 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, as well as several chains of transmission that are only detected from environmental surveillance, indicates the potential for surveillance gaps at the sub-national level.

Data Completeness
Percent of NPAFP cases with unknown age

0%
0%

## **Russian Federation**

Total number of states \ provinces: 89

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 98% Pol 98%

# Non Polio AFP Profile

Percent 0-dose (national) 7.5%	Percent states with < 10% 0-dose NPAFP children  Non-adjusted 0% (0 of 0) % within acceptable range 0% (0 of 0)				
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
51.4%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	l indicator	Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
Mop up-OPVt	01-Sep-10				
Mop up-OPVt	01-Oct-10				
SNID-OPVt	27-Nov-10				

# Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	14	7	0	0	25-Sep-10

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
1.9	Non-adjusted 35.8% (24 of 67)	% within acceptable range	77.6% (52 of 67)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
95.3%	Non-adjusted 94.9% (74 of 78)	% within acceptable range	98.7% (77 of 78)	

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 37%

## Poliovirus History

In 2010, the 14 reported cases are the result of at least 5 importation events, directly or indirectly, from the outbreak viruses of Tajikistan. In several of the importations, there is evidence of limited local transmission and at least one instance of long distance onward transmission within the Russian Federation. There was little indication of missed chains of transmission based upon the close genetic linkage among isolates within the country.

# **Data Completeness**

Percent of NPAFP cases with unknown age

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

0.7%

## Senegal

Total number of states \ provinces: 11

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 86% Pol 83%

# Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children			
7.8%	Non-adjusted 50% (1 of 2)	% within acceptable range	100% (2 of 2)	
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children			
58.9%	Non-adjusted 0% (0 of 2)	% within acceptable range	50% (1 of 2)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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	100% (13 of 13)	85% (11 of 13)
NID-mOPV1	26-Jun-10	4.7	9.6	92% (12 of 13)	62% (8 of 13)
NID-mOPV1	27-Oct-10	8.5	11.6	77% (10 of 13)	54% (7 of 13)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	18	11	0	0	30-Apr-10

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
3.8	Non-adjusted 90.9% (10 of 11)	% within acceptable range	100% (11 of 11)	
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
62.8%	Non-adjusted 9.1% (1 of 11)	% within acceptable range	36.4% (4 of 11)	

## 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.

# **Data Completeness**

Percent of NPAFP cases with unknown age 0%

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

0%

## Sierra Leone

Total number of states \ provinces: 4

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) 75% Pol 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+dose NPAFP children			
44.2%	Non-adjusted 0% (0 of 3)	% within acceptable range	0% (0 of 3)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
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)
NID-mOPV1	28-Oct-10	6.4	11.2	75% (3 of 4)	0% (0 of 4)
NID-mOPV1	26-Nov-10	8.8	11.6	50% (2 of 4)	25% (1 of 4)

# Surveillance

Polio Cases (W1, W3, and VDPVs)

		Count			
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	1	1	0	0	28-Feb-10

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2				
5.8	Non-adjusted 100% (4 of 4)	% within acceptable range 100% (4 of 4)			
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
91.2%	Non-adjusted 100% (4 of 4)	% within acceptable range 100% (4 of 4)			
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 100%					

# Poliovirus History

The WPV1 virus in Sierra Leone 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**

0% Percent of NPAFP cases with unknown age

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

0%

Somalia

Total number of states \ provinces: 19

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 31% Pol 28%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
11.8%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
55.9%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
CHD-OPVb	01-May-10				
CHD-OPVb	01-Jun-10				
SNID-OPVt	01-Sep-10				

# Surveillance

Polio Cases (W1, W3, and VDPVs)

		C	Count		
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
cVDPV 2	2	2	0	0	18-Aug-10

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >	= 2	
3.4	Non-adjusted 100% (16 of 16)	% within acceptable range	100% (16 of 16)
% adequate stools (nat.)	Percent states with adequate stoc	ol proportion >= 80%	
99.4%	Non-adjusted 100% (19 of 19)	% within acceptable range	100% (19 of 19)

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 100%

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

# **Data Completeness**

Percent of NPAFP cases with unknown age

0%	
0%	

# South Sudan

Total number of states \ provinces: 10

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 % Pol %

Non Polio AFP Profile

Percent 0-dose (national) 8.2%	Percent states with < 10% 0-dose NPAFP children  Non-adjusted 75% (3 of 4) % within acceptable range 75% (3 of 4)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
62.9%	Non-adjusted 0% (0 of 4)	% within acceptable range	50% (2 of 4)

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date		sed children narking)	Percent of stat missed	es with < 10% children
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >	<b>&gt;=</b> 2		
4.7	Non-adjusted 100% (10 of 10)	% within acceptable range	100% (10 of 10)	
% adequate stools (nat.)	Percent states with adequate stoo	ol proportion >= 80%		
92.4%	Non-adjusted 100% (10 of 10)	% within acceptable range	100% (10 of 10)	
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 100%				

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

Percent of NPAFP cases with unknown age

	0%
n dose history	0%
· · · · · ,	

Sudan

Total number of states \ provinces: 25

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 84% Pol 84%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose	NPAFP children	
5.3%	Non-adjusted 83.3% (5 of 6)	% within acceptable range	83.3% (5 of 6)
Percent 4+ doses (national)	Percent states with > 80% 4+dose	e NPAFP children	
75.5%	Non-adjusted 16.7% (1 of 6)	% within acceptable range	66.7% (4 of 6)

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	l indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-OPVb	29-Mar-10				
SNID-OPVt	21-Jun-10				
NID-OPVt	22-Feb-11				

# Surveillance

Polio Cases (W1, W3, and VDPVs)

Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >	= 2	
3.2	Non-adjusted 88% (22 of 25)	% within acceptable range	100% (25 of 25)
% adequate stools (nat.)	Percent states with adequate stoc	ol proportion >= 80%	
94.9%	Non-adjusted 100% (25 of 25)	% within acceptable range	100% (25 of 25)

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 77.6%

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

# **Data Completeness**

Percent of NPAFP cases with unknown age

0%	
0%	

# **Tajikistan**

Total number of states \ provinces: 6

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 93% Pol 93%

# Non Polio AFP Profile

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

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

			National indicator		al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-OPVm1	04-May-10				
NID-mOPV1	18-May-10	0.5	0.2	100% (5 of 5)	75% (3 of 4)
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)
Mop up-OPVm1	13-Sep-10				
NID-OPVt	04-Oct-10				
NID-OPVt	08-Nov-10				

#### Surveillance

Polio Cases (W1, W3, and VDPVs)

		Count			
Serotype	2010 (Ja	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	458	35	0	0	04-Jul-10

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2			
6.7	Non-adjusted 80% (4 of 5)	% within acceptable range 100% (5 of 5		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%			
86.5%	Non-adjusted 80% (4 of 5)	% within acceptable range 80% (4 of 5)		

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 53.6%

## 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. Incomplete sequence data does not allow an assessment of the degree of genetic linkage among the isolates within Tajikistan and therefore, no inference about surveillance sensitivity can be made.

# **Data Completeness**

Percent of NPAFP cases with unknown age

0% 66.7%

Togo

Total number of states \ provinces: 6

# **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 89% Pol 89%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
3.2%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
54.8%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National indicator		Sub national indicator	
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10 <sup>st</sup> missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-mOPV1	01-Apr-10	4.4	10.8	86% (6 of 7)	57% (4 of 7)
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	2010 (Jan-Dec)		2011 (Jan-present)		Date of onset for
	cases	districts	cases	districts	last case

# Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate	>= 2			
2.2	Non-adjusted 66.7% (4 of 6)	% within acceptable range	83.3% (5 of 6)		
% adequate stools (nat.)	Percent states with adequate stool proportion >= 80%				
95.2%	Non-adjusted 100% (6 of 6)	% within acceptable range	100% (6 of 6)		
Percent of population <15 y	ears of age living in states / prov. w	here both surveillance indicator	rs are met <b>70.5</b> %		

# Poliovirus History

N/A (no wild poliovirus in over 1 year)

## **Data Completeness**

Percent of NPAFP cases with unknown age

0%			
19.4%			

## **Turkmenistan**

Total number of states \ provinces: 6

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 96% Pol 97%

Non Polio AFP Profile

Percent 0-dose (national)	Percent states with < 10% 0-dose NPAFP children				
0%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children				
85.7%	Non-adjusted 0% (0 of 0)	% within acceptable range	0% (0 of 0)		

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

_		National indicator		Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of stat missed	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
NID-OPVt	12-Jul-10				
NID-OPVm1	26-Aug-10				
NID-OPVm1	20-Sep-10				

# Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	3	2	0	0	28-Jun-10

# Non Polio AFP data

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

Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 100%

# Poliovirus History

Turkmenistan was polio-free until three cases were reported in 2010 that represents two importation events from the outbreak in Tajikistan. With only a single case from one importation and only two cases from the other and incomplete data from Tajikistan, there is insufficient virologic data to inform an assessment of surveillance sensitivity in Turkmenistan.

# **Data Completeness**

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

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Uganda

Total number of states \ provinces: 79

## **Immunization**

Immunization coverage (2009 nat. WHO-UNICEF estimates) DTP3 64% Pol 59%

# Non Polio AFP Profile

Percent 0-dose (national) 5.5%	Percent states with < 10% 0-dose Non-adjusted 0% (0 of 0)	e NPAFP children % within acceptable range 0% (0 of 0)	
Percent 4+ doses (national)	Percent states with > 80% 4+dose NPAFP children		
37.3%	Non-adjusted 0% (0 of 0)	% within acceptable range 0% (0 of 0)	

Independent Monitoring (IM data were not collected, or were not available in detail for all rounds shown)

		National	indicator	Sub nation	al indicator
Campaign type	Start date	Percent missed children (finger marking)		Percent of states with < 10% missed children	
(mixed rounds abbreviated as: t, b, 1, 3)		House to House (%)	Out of house (%)	House to House	Out of house
Mop up-OPVt	30-Oct-10				
SNID-mOPV1	20-Nov-10	6.7	7	75% (3 of 4)	75% (3 of 4)
SNID-mOPV1	11-Dec-10	6.7	7	75% (3 of 4)	75% (3 of 4)
SNID-mOPV1	15-Jan-11	4.7	6.4	75% (3 of 4)	100% (4 of 4)

#### Surveillance

Polio Cases (W1, W3, and VDPVs)

	Count				
Serotype	2010 (J	an-Dec)	2011 (J	an-present)	Date of onset for
	cases	districts	cases	districts	last case
W1	4	2	0	0	15-Nov-10

## Non Polio AFP data

NPAFP rate (national)	Percent states with NPAFP rate >= 2		
2.5	Non-adjusted 49.2% (32 of 65) % within acceptable range 76.9% (50 of 65)		
% adequate stools (nat.) 87.3%	Percent states with adequate stool proportion >= 80%  Non-adjusted 78.5% (62 of 79) % within acceptable range 91.1% (72 of 79)		
Percent of population <15 years of age living in states / prov. where both surveillance indicators are met 35.9%			

## Poliovirus History

The WPV1 viruses in Uganda during 2010 are most closely linked to a 2009 Kenya virus, however, with a significant genetic gap from 2009 isolates. There was little indication of missed chains of transmission in 2010 in the area of the outbreak based upon the close genetic linkage among isolates in Uganda. However, the missed virus transmission from 2009 represents some concern for surveillance quality in the border area shared with Kenya.

## **Data Completeness**

Percent of NPAFP cases with unknown age

0% 4.1%