



Sudan Weekly AFP Surveillance Report

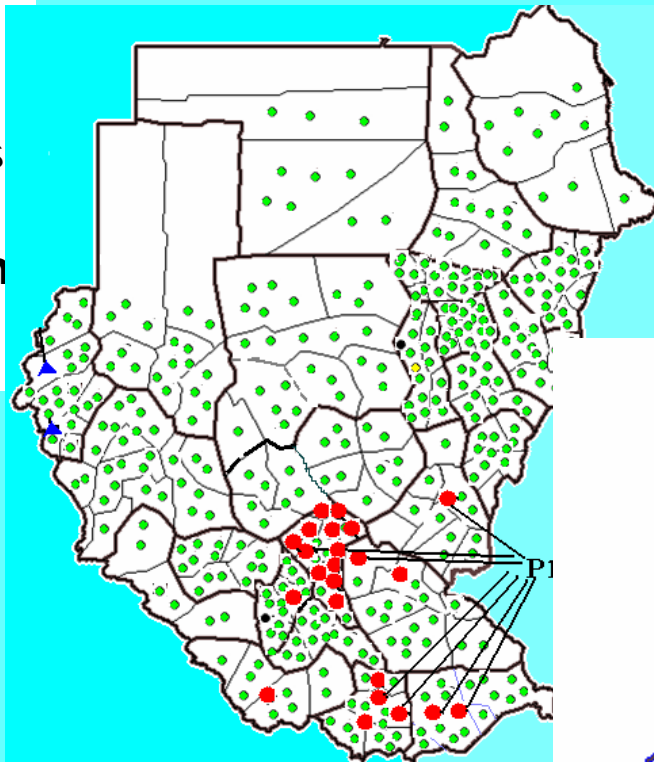
Week 9

(Ending on 1 March 2009)

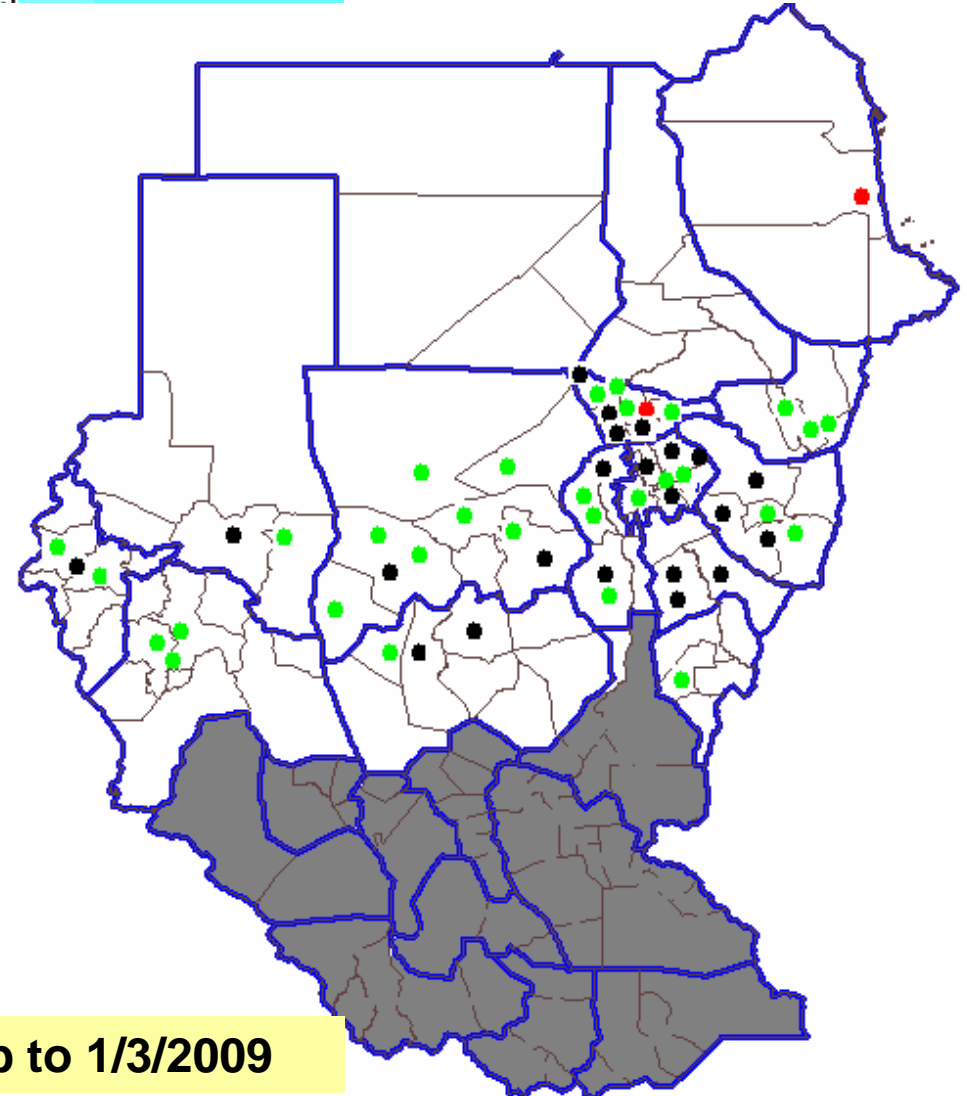
**National AFP
Surveillance system
Sudan**



Map 1.
Distribution
of AFP cases
by
classification
Sudan 2008



Map 2. Distribution of
AFP cases by
classification
N Sudan 2009*



* Up to 1/3/2009

Table 1. New polio (P1) cases in 2009

Khartoum case:

- Age: 8 years
- Sex: Female
- Date of onset:
4/2/2009
- Date of stool
collection:
8 & 9 Feb 2009
- OPV doses: 15 doses
(3 routine & 12 SIAs)

Port Sudan case:

- Age: 15 months
 - Sex: Male
 - Date of onset:
6/2/2009
 - Date of stool
collection:
10 & 11 Feb 2009
 - OPV doses: zero
- Reason: cultural barrier

Fig 1. Total AFP cases, North Sudan 2009*

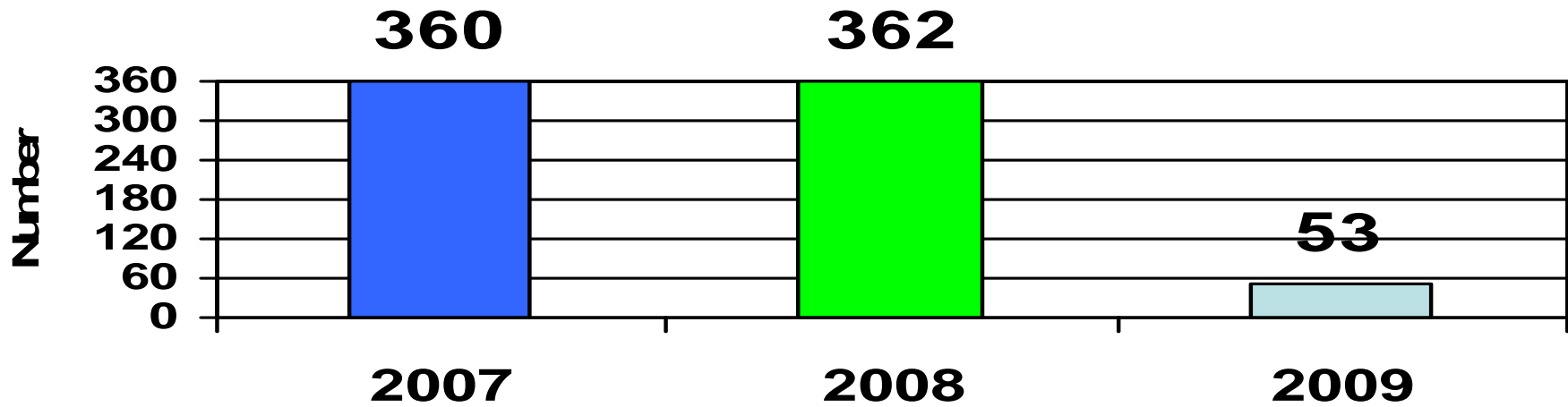
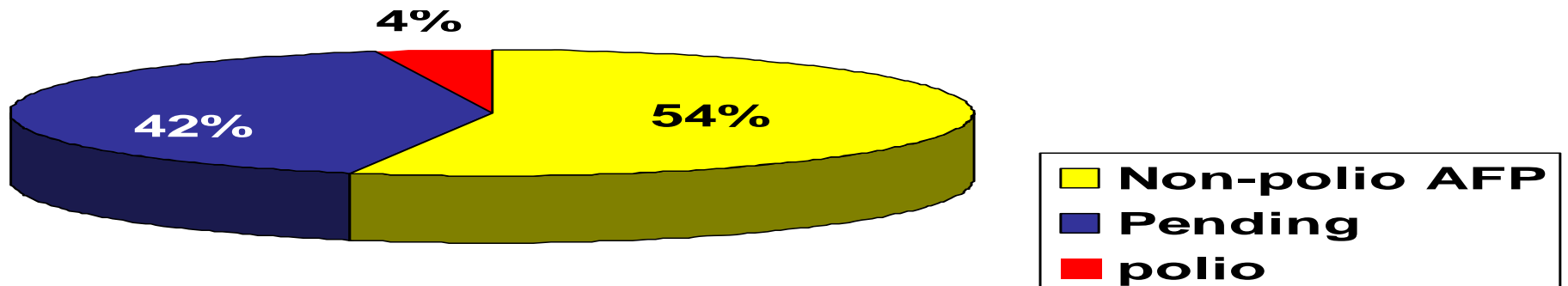


Fig 2. Total AFP cases by classification, North Sudan, 2009



* Up to 1/3/2009

Fig 3. North SUDAN AFP cases by age group, 2009

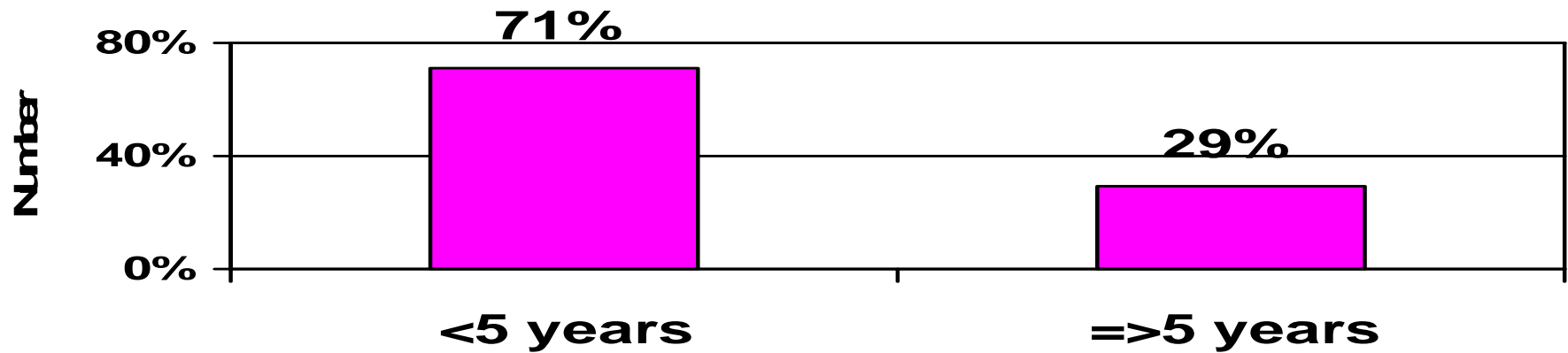
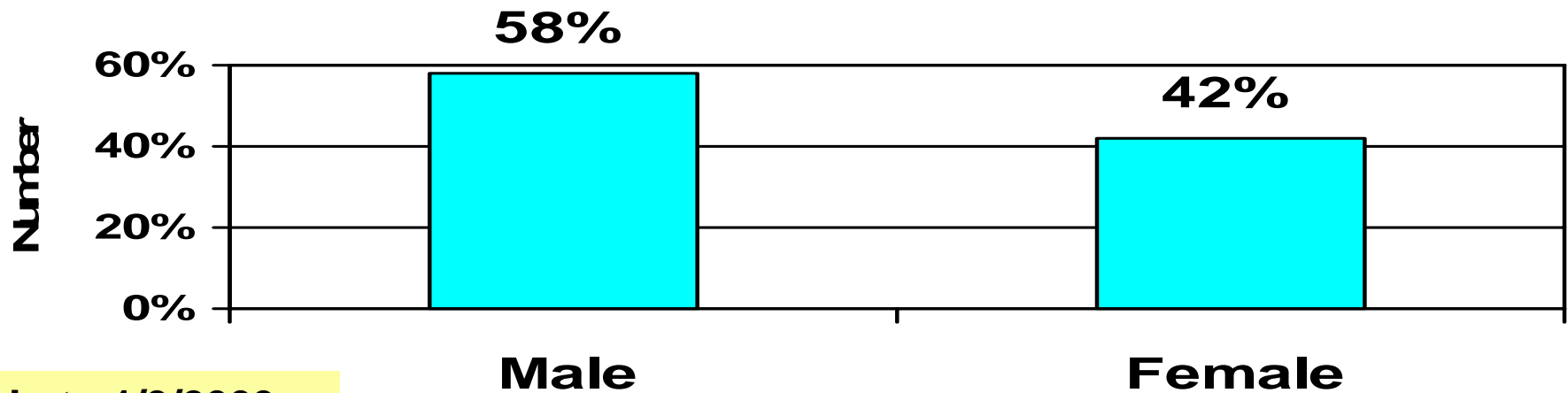


Fig 4. North SUDAN AFP cases by sex 2009



* Up to 1/3/2009

Figure 5. Percent distribution of AFP cases by time of detection, North Sudan, 2008

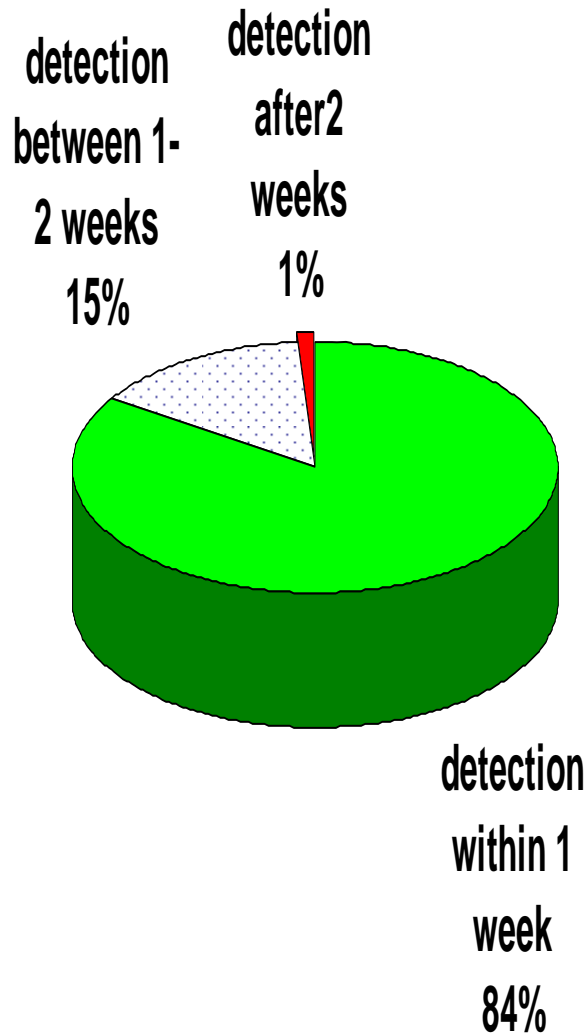
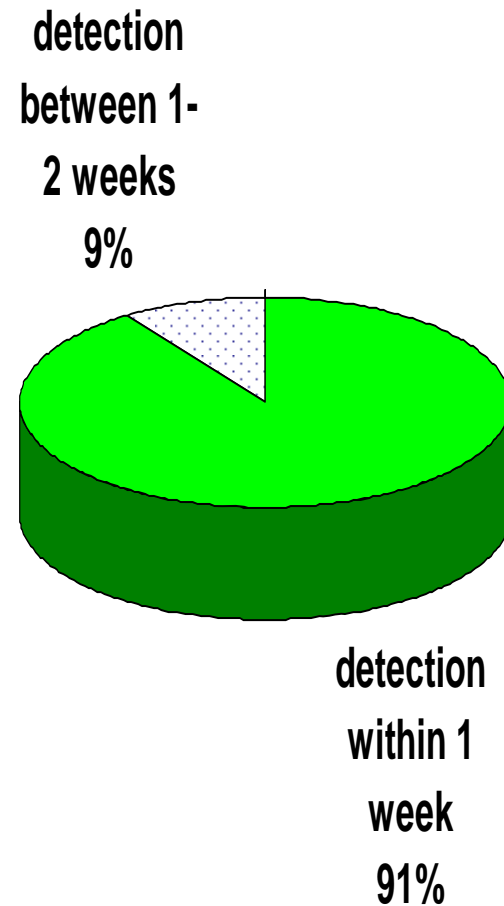


Figure 6. Percent distribution of AFP cases by time of detection, North Sudan, 2009*



* Up to 1/3/2009

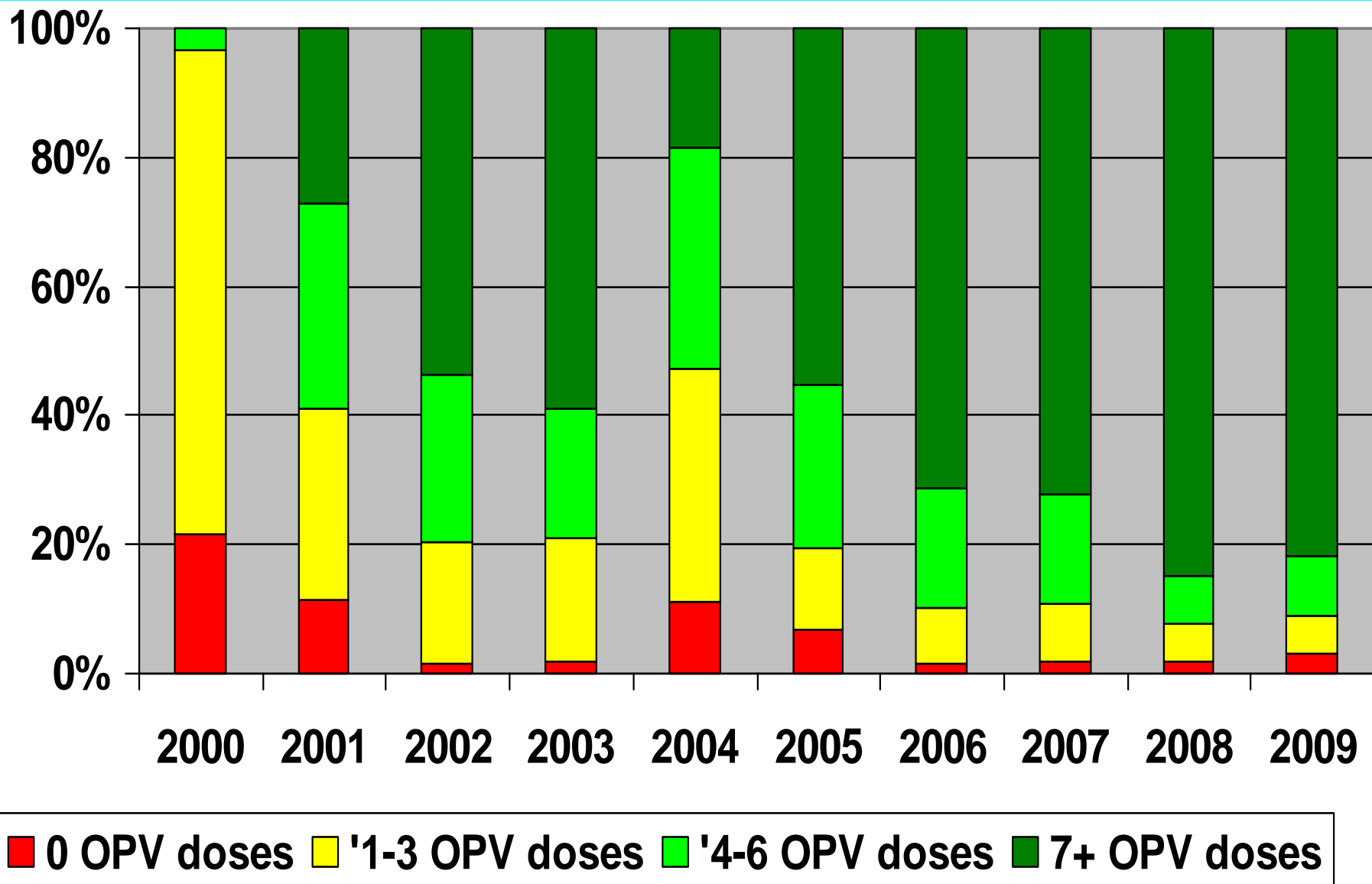
Table 2. Major AFP surveillance performance indicators, Northern States, 2008

State	U 15 yrs population	Total reported AFP cases	Non-polio AFP cases	Pending classification	Polio cases	Compatible cases	% Adequate stools	Annualized AFP rate	% NPEV
B. Nile	335,349	14	14	0	0	0	100%	4.2	14%
Gedarif	783,014	18	18	0	0	0	100%	2.3	11%
Gezira	1,768,855	45	45	0	0	0	98%	2.5	16%
Kasala	776,264	20	20	0	0	0	100%	2.6	15%
Khartom	2,154,959	53	53	0	0	0	100%	2.5	15%
N.Darf	786,139	21	21	0	0	0	95%	2.7	19%
N.Kord	1,206,410	31	31	0	0	0	100%	2.6	10%
Northern	254,978	10	10	0	0	0	80%	3.9	22%
Red Sea	327,066	11	11	0	0	0	100%	3.4	18%
River Nile	437,544	17	17	0	0	0	100%	3.9	18%
Sennar	665,628	15	15	0	0	0	93%	2.3	13%
S.Darfur	1,579,911	37	37	0	0	0	100%	2.3	8%
S. Kord	922,086	21	21	0	0	0	100%	2.3	14%
W.Darfur	884,736	25	23	0	2	0	96%	2.6	12%
W. Nile	775,659	24	23	0	0	1	79%	3.1	14%
Total	13,658,598	362	359	0	2	1	97%	2.6	14%

Table 3. Major AFP surveillance performance indicators, Northern States, up to 1/3/2009

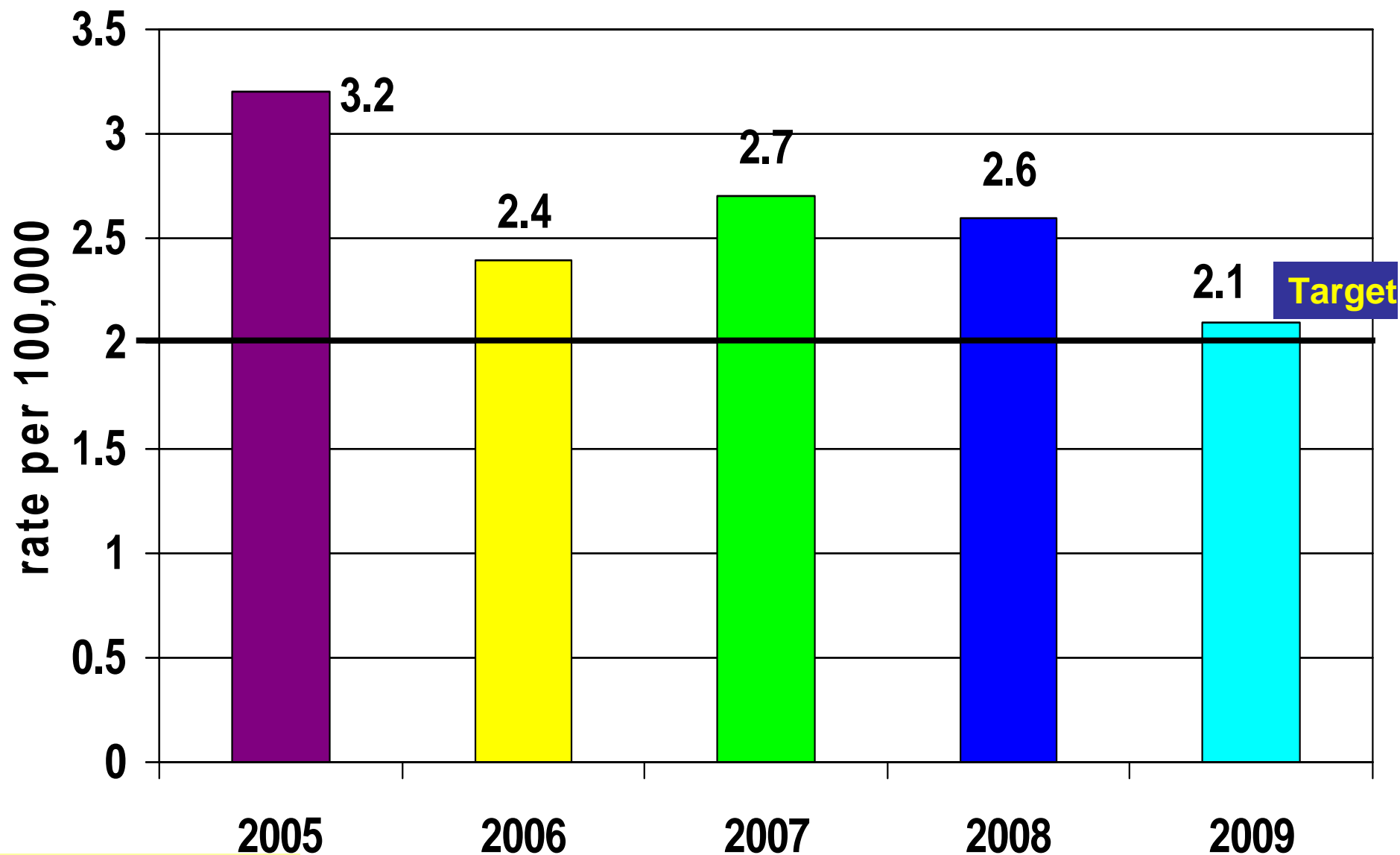
State	U 15 yrs population	Total reported AFP cases	Non-polio AFP cases	Pending classification	Polio cases	Compatible cases	% Adequate stools	Annualized AFP rate	% NPEV
B. Nile	345,141	1	1	0	0	0	100%	1.7	100%
Gedarif	807,992	5	2	3	0	0	100%	3.6	0%
Gezira	1,818,206	7	3	4	0	0	100%	2.2	0%
Kasala	795,748	3	3	0	0	0	100%	2.2	0%
Khartom	2,234,046	9	4	4	1	0	100%	2.1	0%
N.Darf	810,981	2	1	1	0	0	100%	1.4	0%
N.Kord	1,224,747	8	6	2	0	0	88%	3.8	0%
Northern	259,007	0	0	0	0	0			
Red Sea	328,047	1	0	0	1	0	100%	0.0	0%
River Nile	445,463	0	0	0	0	0			
Sennar	682,468	3	0	3	0	0	100%	2.5	0%
S.Darfur	1,633,786	3	3	0	0	0	100%	1.1	0%
S. Kord	934,811	3	1	2	0	0	100%	1.9	0%
W.Darfur	905,704	3	2	1	0	0	100%	1.9	0%
W. Nile	794,818	5	3	2	0	0	100%	3.6	0%
Total	16,525,252	53	29	22	2	0	98%	2.1	3%

Fig 7. Percent distribution of AFP cases < 60 months by number of OPV doses, North Sudan 2000-09*



* Up to 1/3/2009

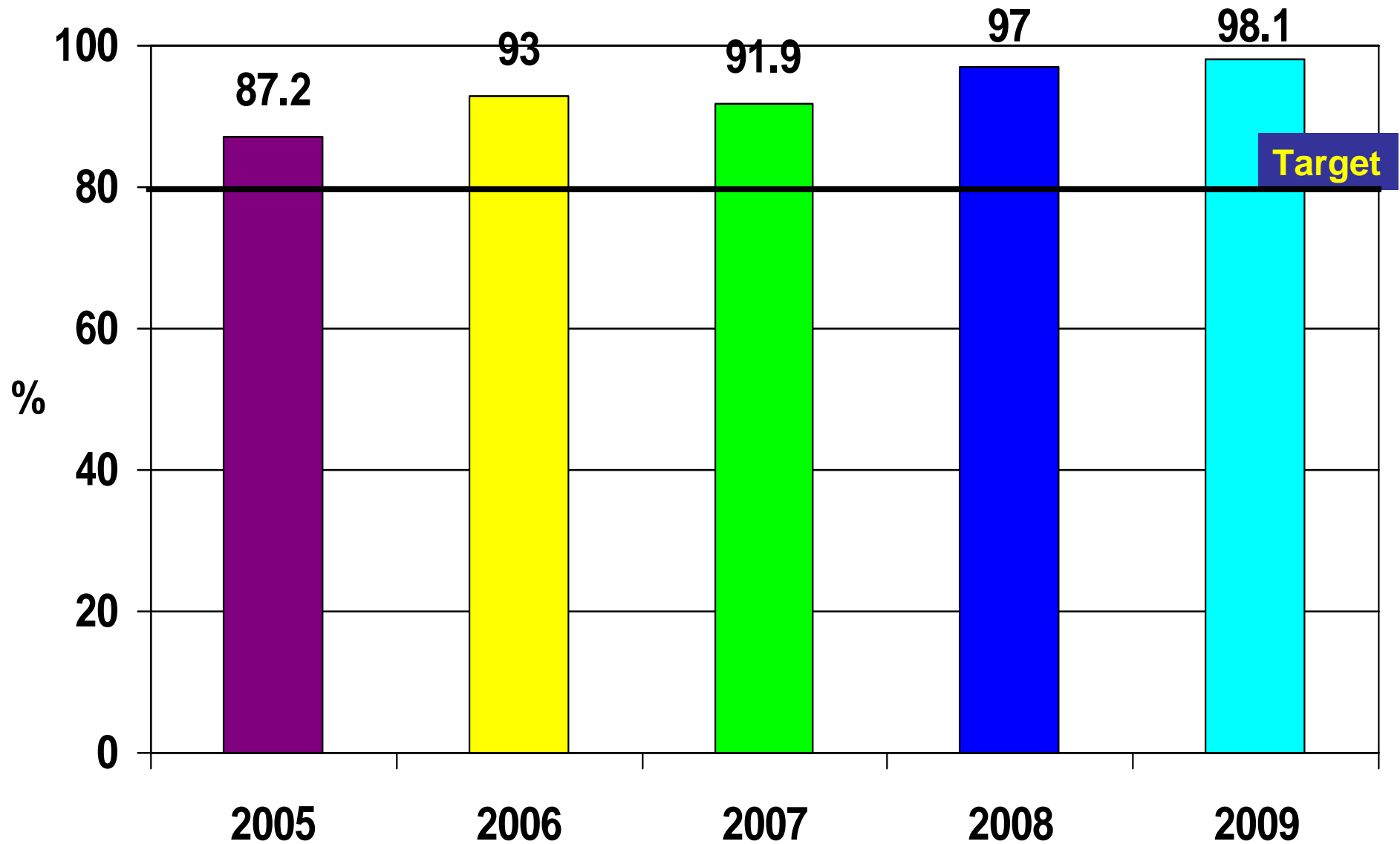
Fig 8. Annualized Non-Polio AFP rate per 100,000 children under 15 years of age, North Sudan, 2005 – 2009*



* Up to 1/3/2009

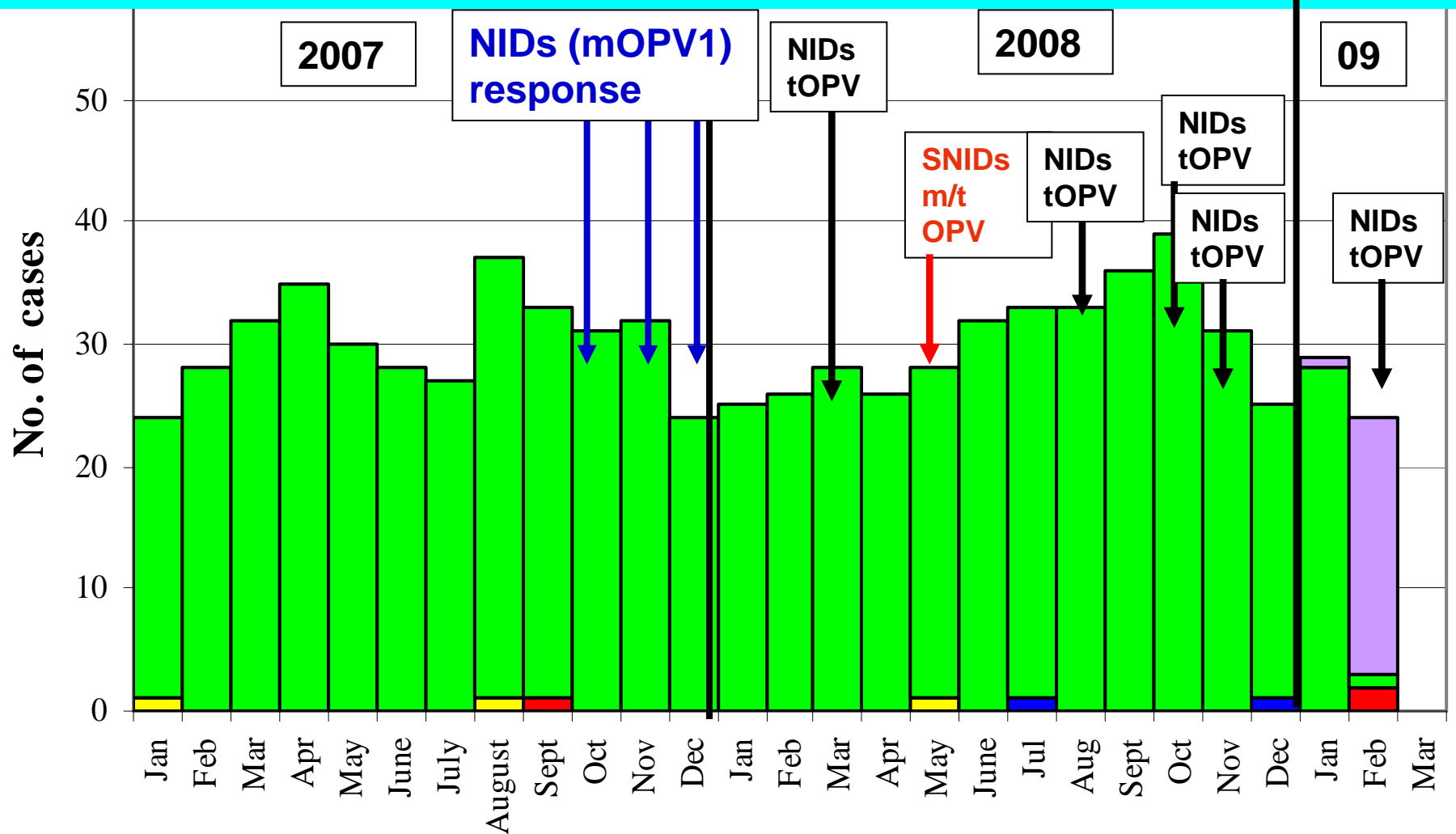
Fig 9. Adequate stool collection rate

North Sudan, 2005 – 2009*



* Up to 1/3/2009

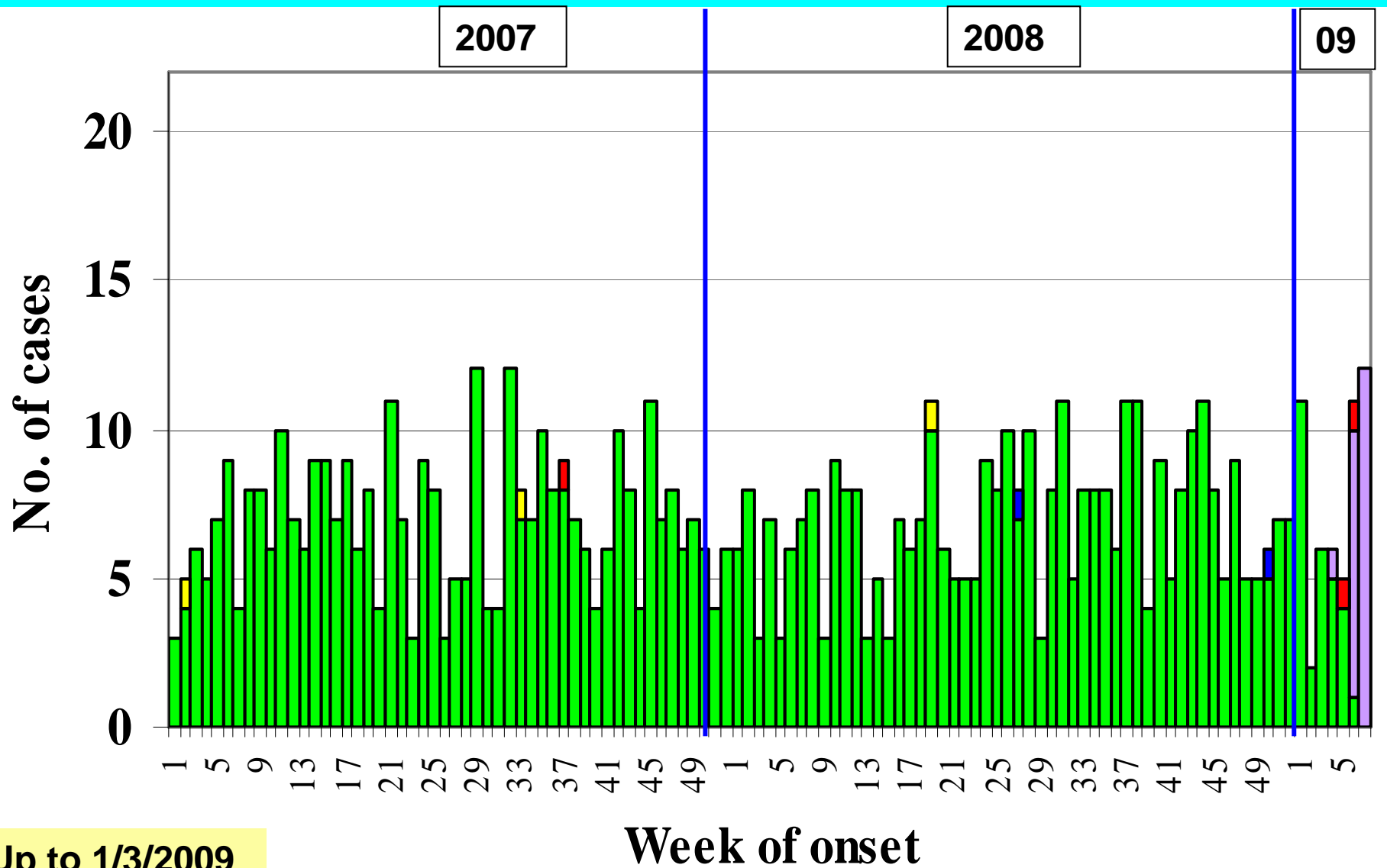
Fig 10. Distribution of polio and non-polio AFP Cases by classification, month of onset & SIA response to the poliovirus importation in North SUDAN 2007-09*



* Up to 1/3/2009

■ P3 ■ P1 ■ Compatible ■ Non-polio ■ Pending classification

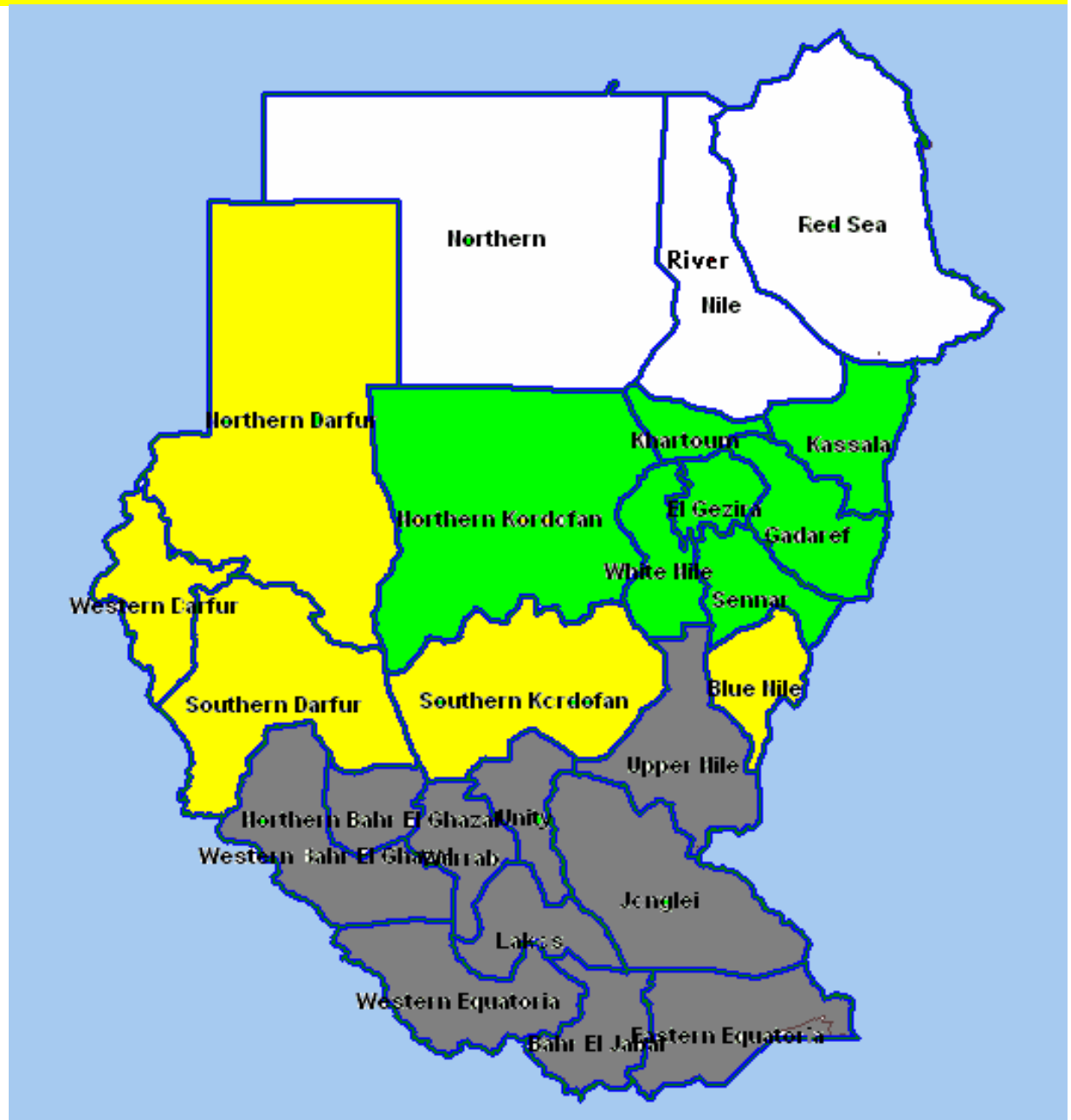
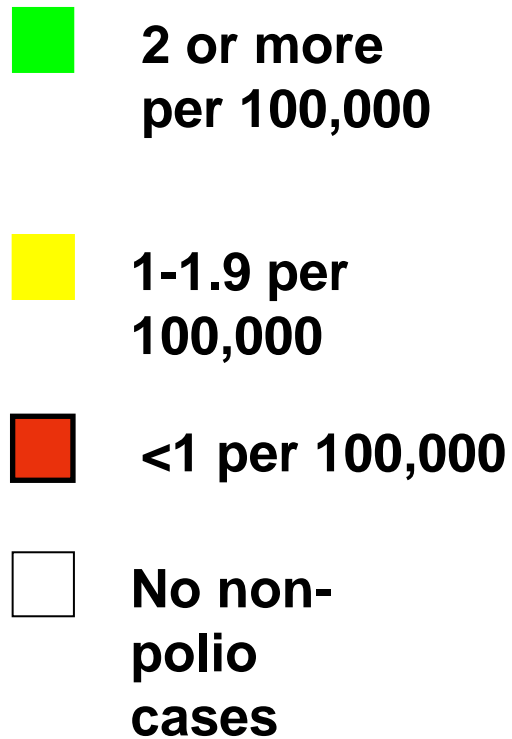
Fig 11. Distribution of AFP cases by classification and week of onset, North Sudan 2007 – 2009*



* Up to 1/3/2009

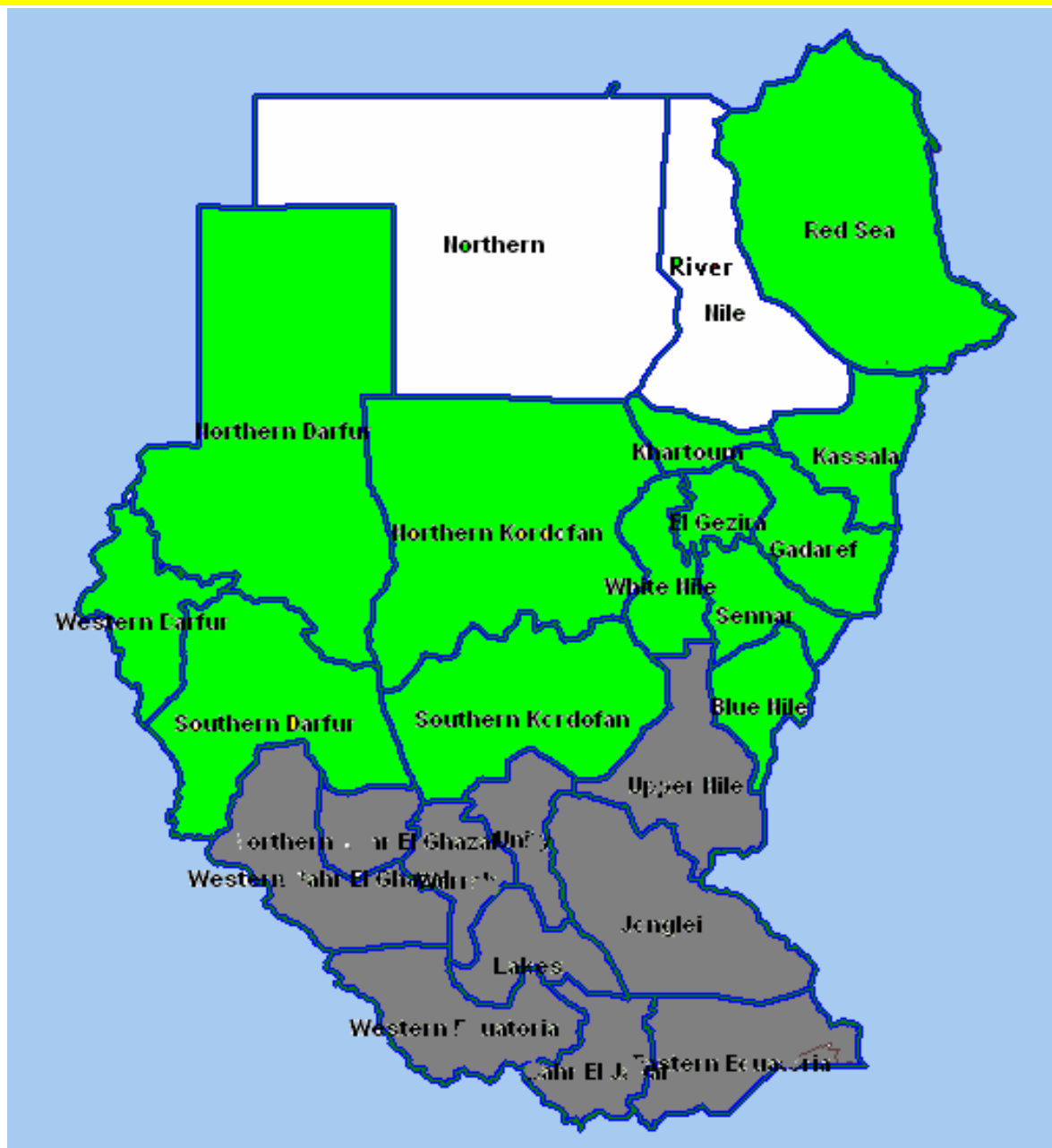
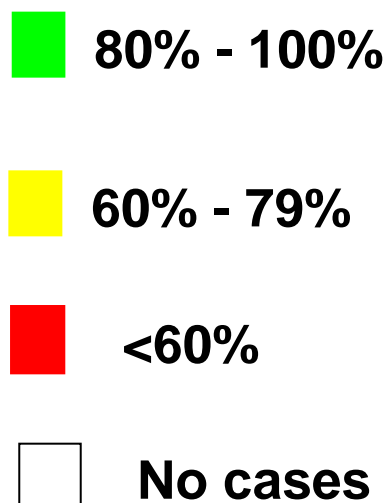
■ Non-polio
 ■ Pending classification
 ■ P1
 ■ Compatible
 ■ P3

Map 3. Annualized non-polio AFP rate per 100,000 by state, 2009*



* Up to 1/3/2009

Map 4. Percent distribution of AFP cases having adequate stool samples by state, 2009*



* Up to 1/3/2009

**Table 4. National polio lab performance indicators
North Sudan, 2007-2009***

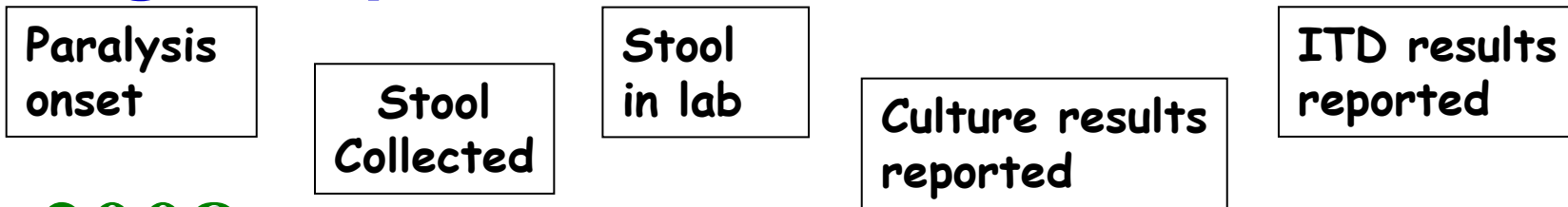
Indicator	2007	2008	2009*
Total AFP cases tested in NPL	355	361	52
Cases with wild poliovirus (imported P1)	1	0	2
Cases with wild poliovirus (imported P3)	0	2	0
Cases with non-polio enterovirus	15%	14%	3%
SL viruses No. & (%) from AFP cases	10(3%)	7 (2%)	-
Median days from the time of samples received in the lab to primary culture report or L20B result	14 days	11 days	11 days
Number of AFP contacts tested in the NPL	326	407	50
Contacts with non-polio enterovirus	10.4%	8.1%	10%
Sabin like viruses No. & (%) from contacts	4(1%)	9(2.3%)	-
NSL like viruses No. & (%) from contacts	0	0	1

* Up to 1/3/2009

**Table 5. Polio lab performance
North Sudan, 2008* and 2009***

Week of onset	Total AFP Cases	AFP Cases under process	L20B +ve pending ITD	Negative cases	NPEV positive	% NPEV	Result reported within 14 days	Arrival within 3 days of being collected	Arrival within 3 days of being sent
* Up to 1/3/08	50	0	0	45	5	10 %	76%**	82%	98%
* Up to 1/3/09	52	22	0	29	1	3 %	93%	73%	100%

Fig 12. Specimens' timeliness, NPL, 2008-2009*



2008



Average=21 days
Primary Culture result from Date of onset

Average=29 days
ITD result from date of onset
N=2 polio cases + 3 SL

2009



Average=20 days
Primary Culture result from Date of onset

Average=20 days
ITD result from date of onset
N=2 polio cases

*** Up to 1/3/2009**