



World Health  
Organization

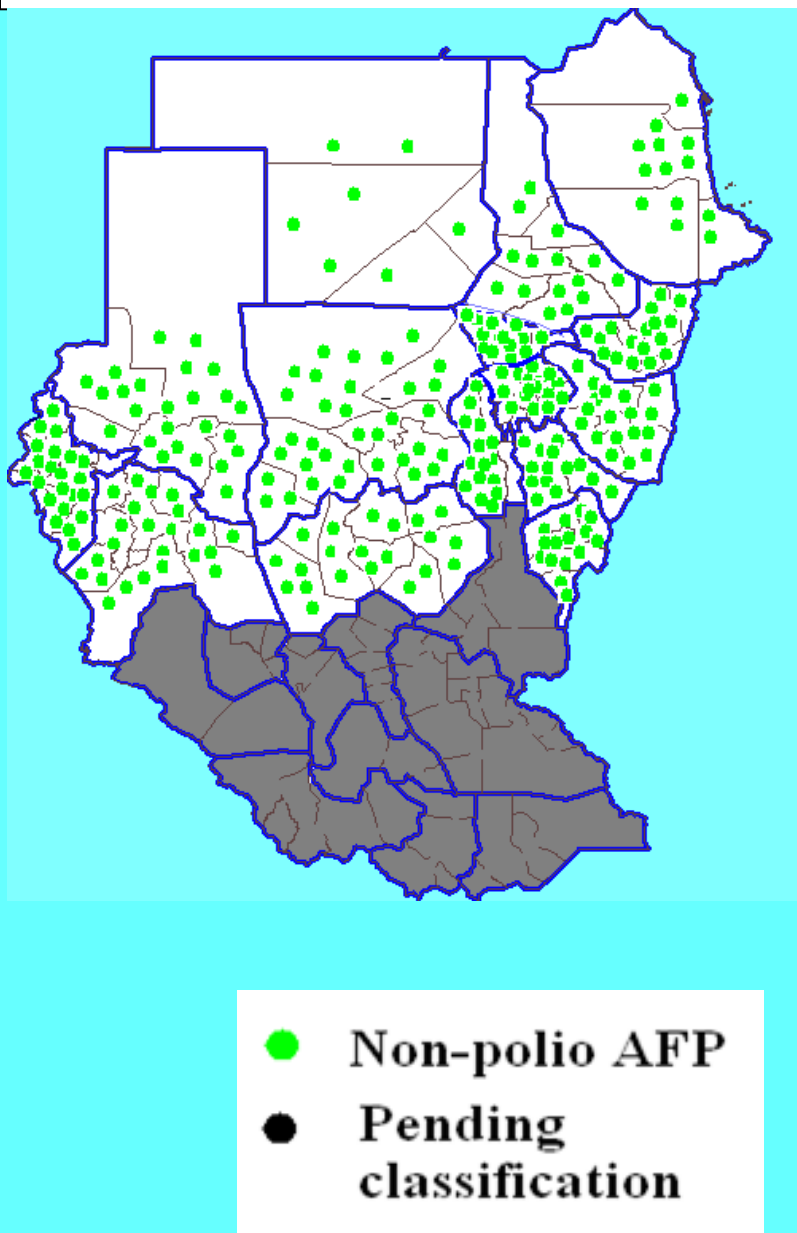


# Sudan Weekly AFP surveillance report week 9

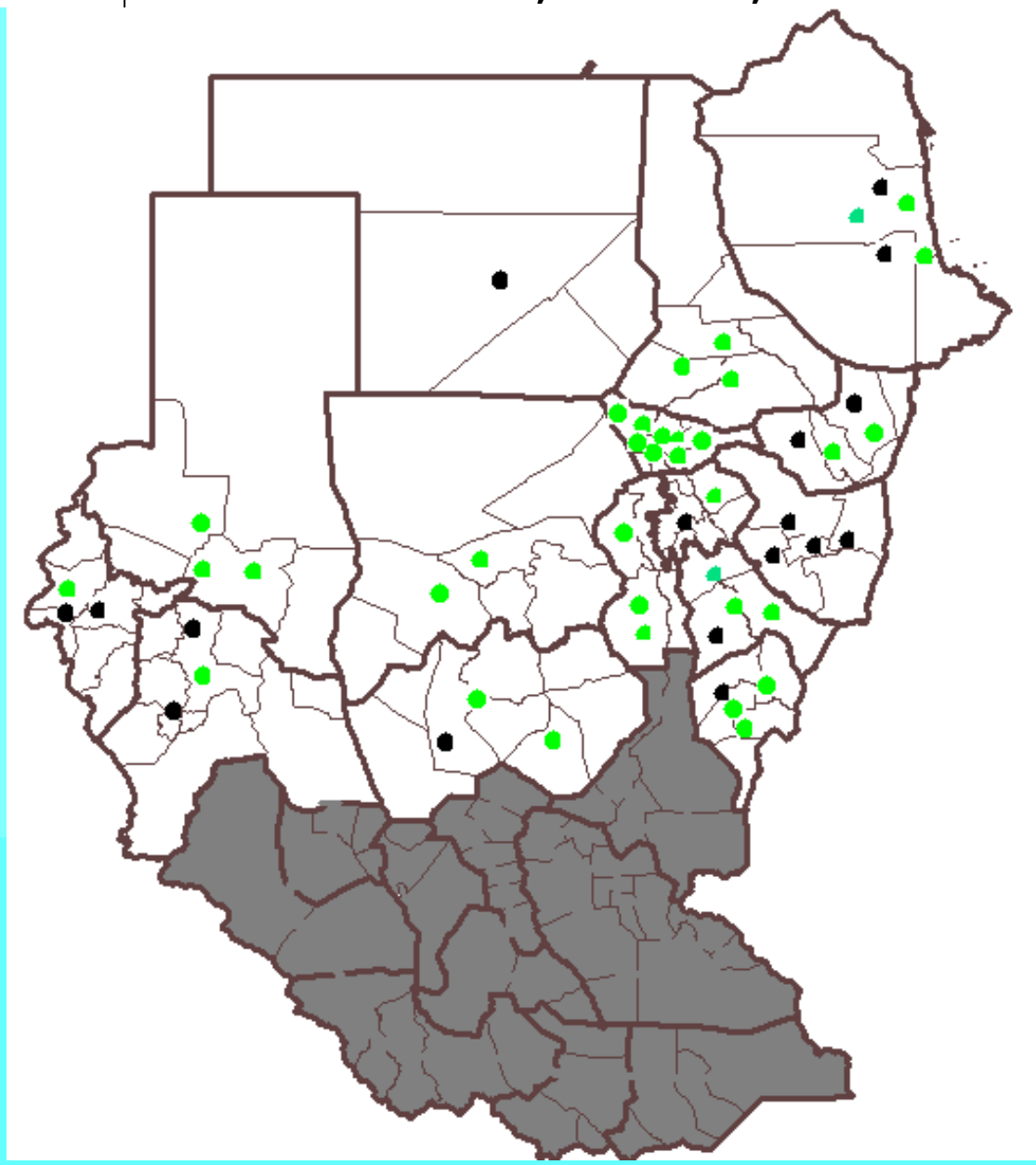
Ending on 6 March 2011

*AFP Surveillance central unit*

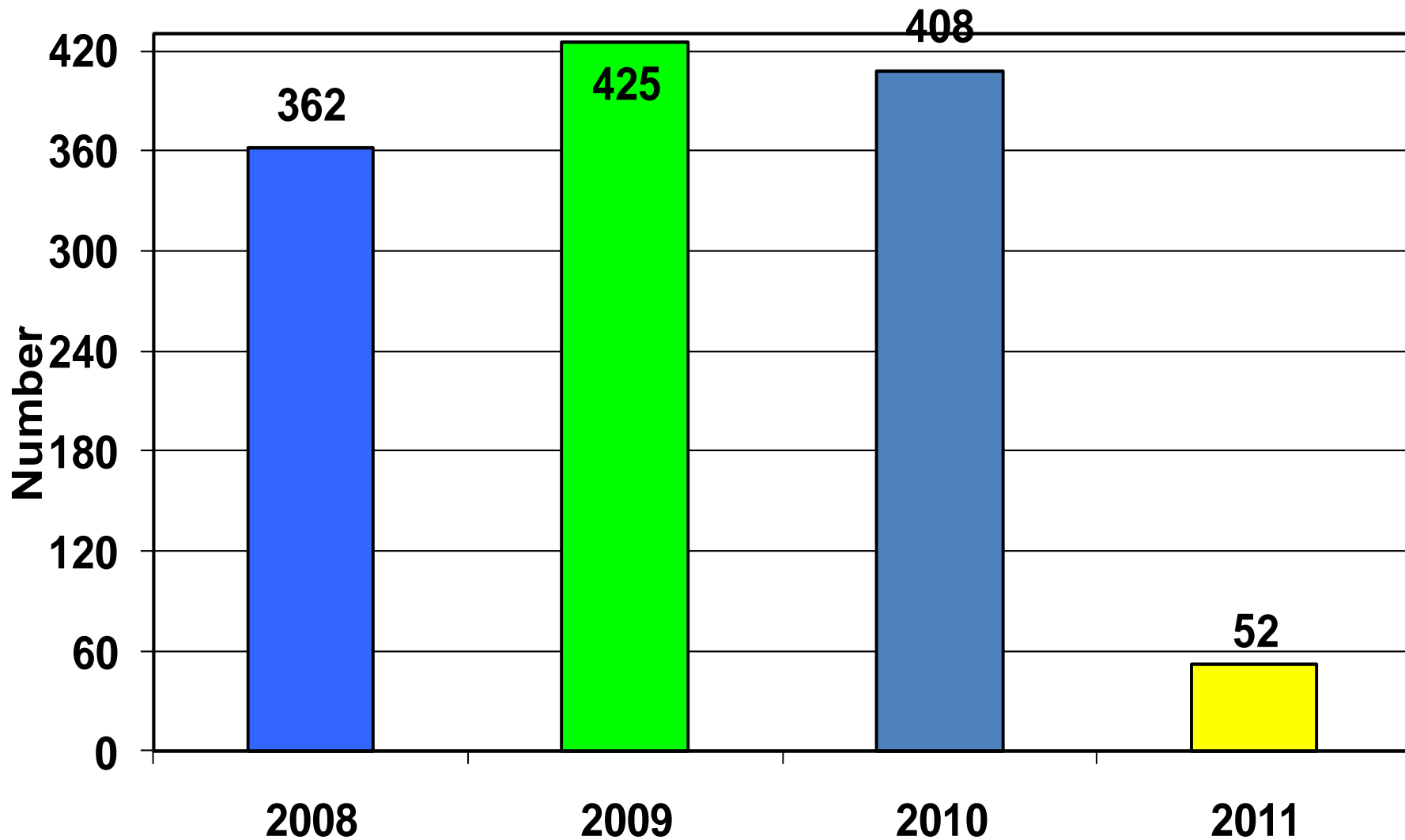
**Map 1. Distribution of AFP cases by classification, N Sudan, 2010**



**Map 2. Distribution of AFP cases by classification, N Sudan, 2011\***

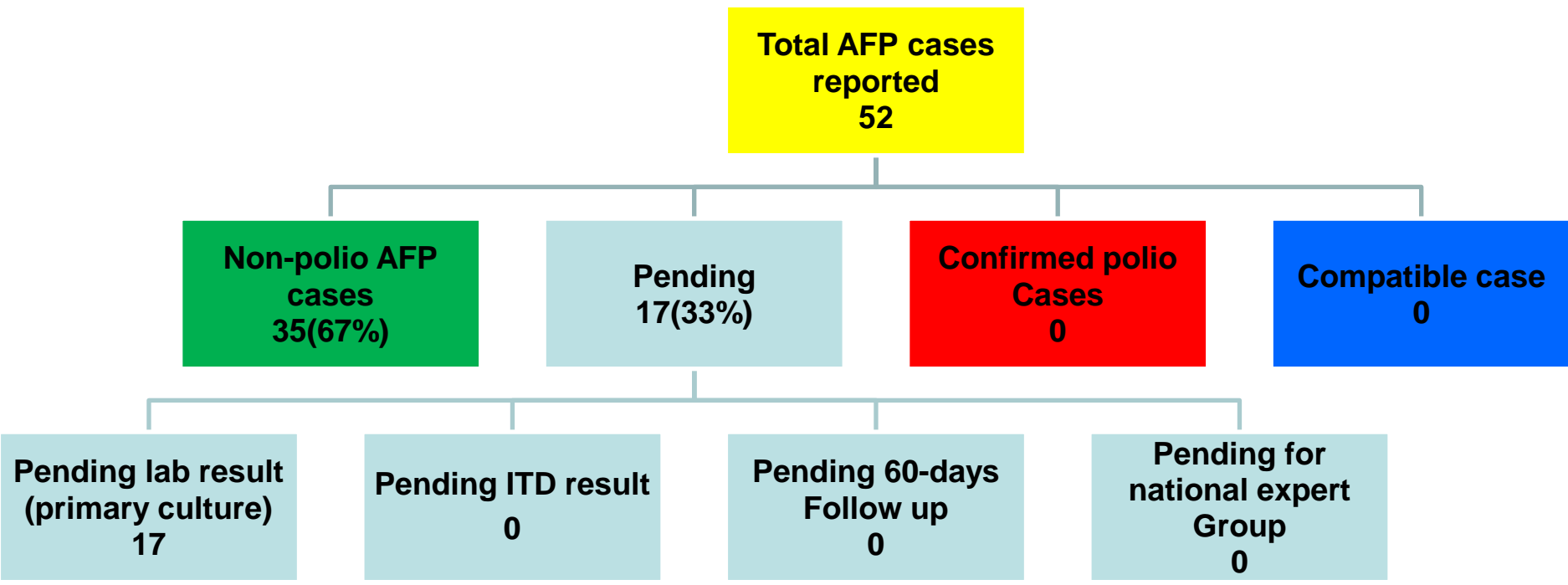


**Fig. 1: Total AFP cases, North Sudan  
2008-2011\***



\* Up to 6/3/2011

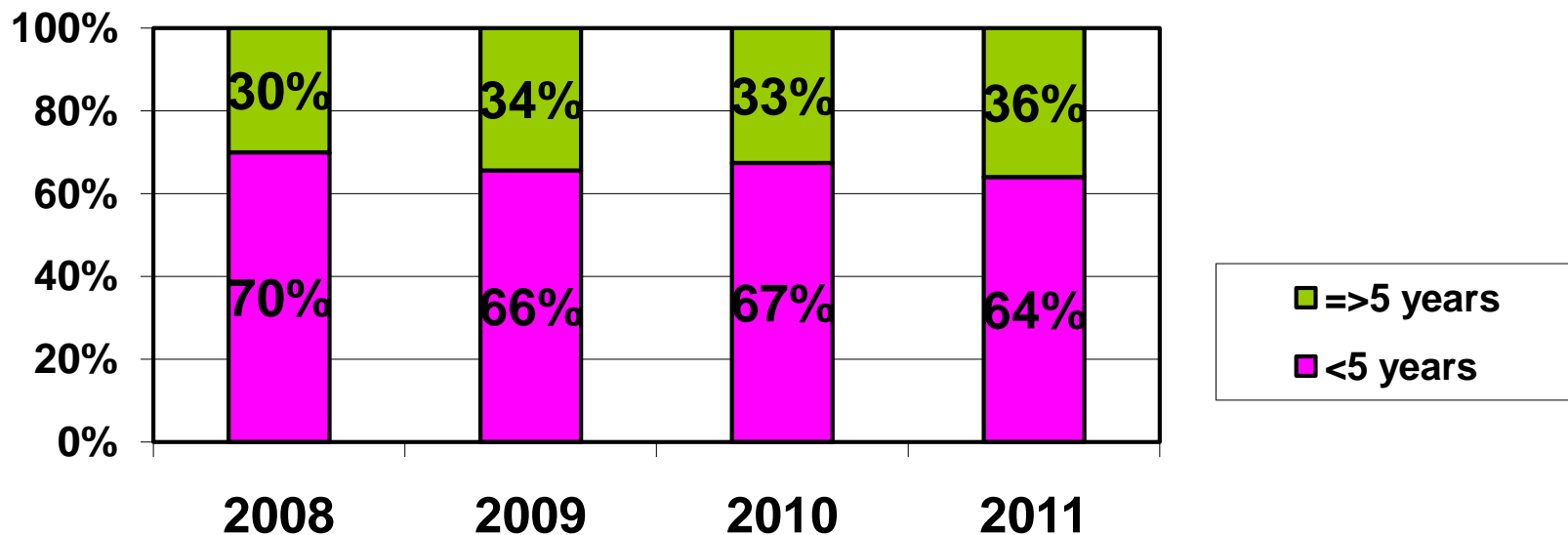
**Fig. 2: Total AFP cases by classification, North Sudan, 2011\***



**The total 2010 AFP cases is 408 were discarded as non-polio AFP cases**

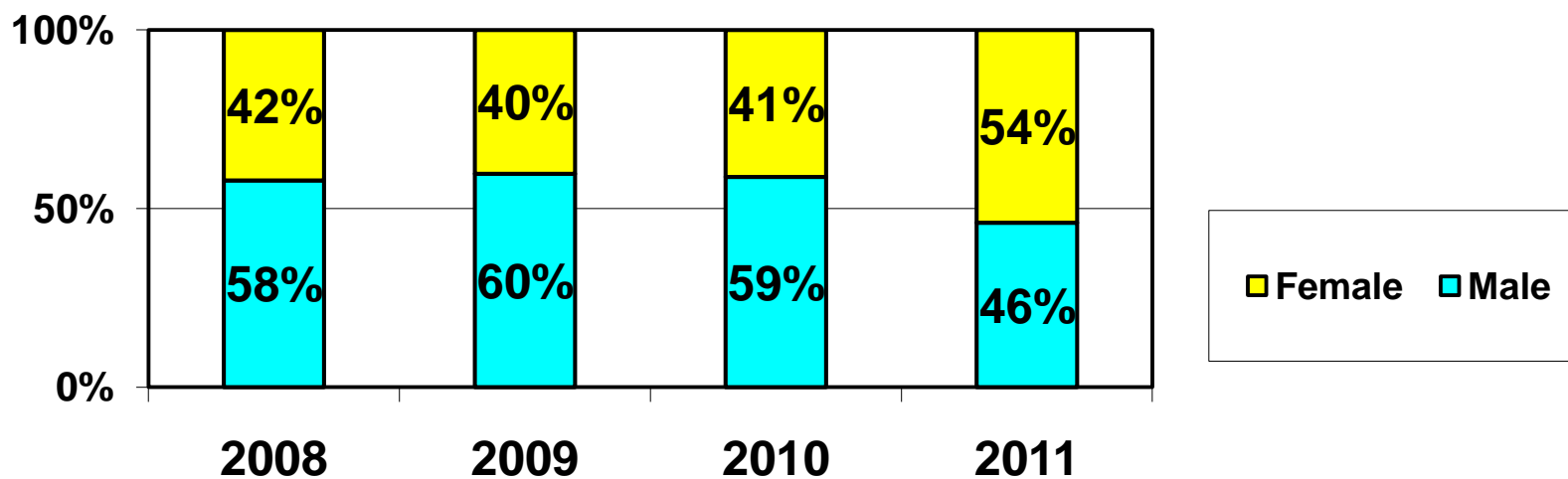
**\* Up to 6/3/2011**

**Fig. 3: North SUDAN AFP cases by age group, 2008 – 2011\***

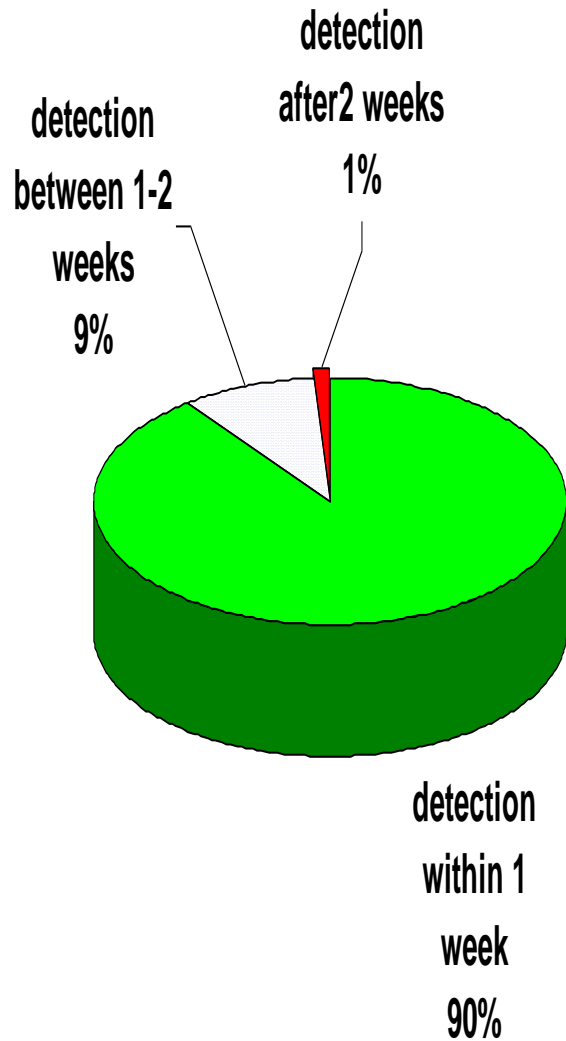


**\* Up to 6/3/2011**

**Fig. 4: North SUDAN AFP cases by sex 2008 – 2011\***

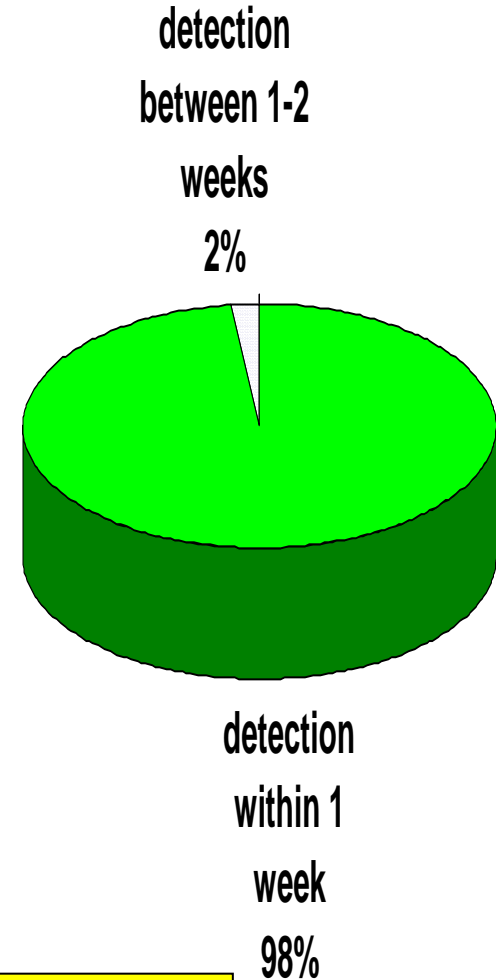


**Fig. 5: Percent distribution of AFP cases by time of detection, North Sudan, 2010**



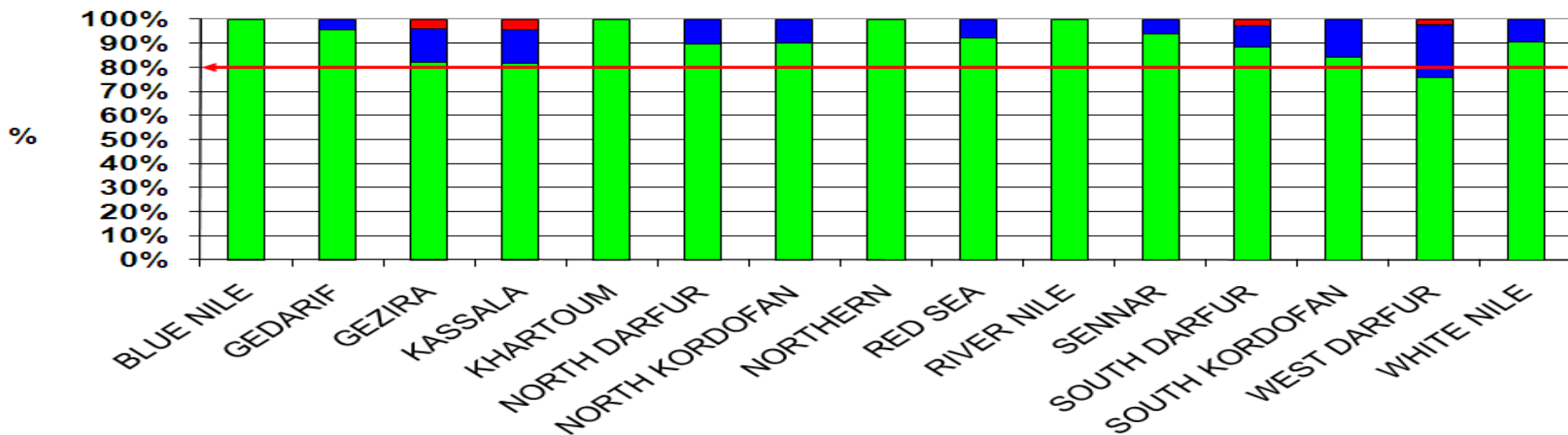
**Fig. 6: Percent distribution of AFP cases by time of detection, North Sudan, 2011\***

**N = 52 AFP cases**

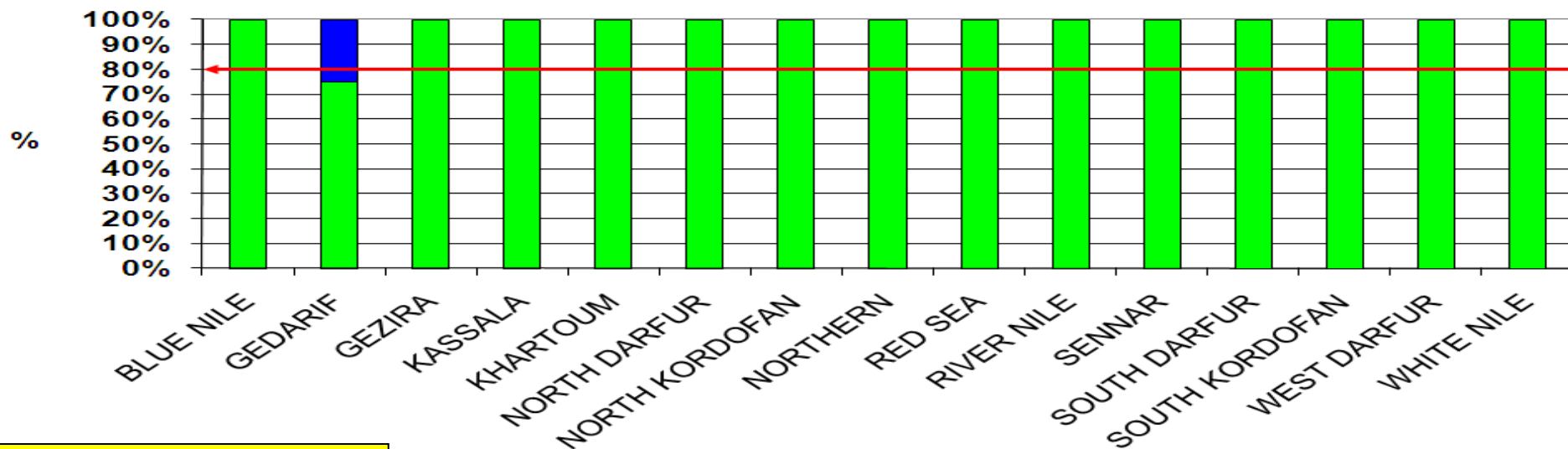


**\* Up to 6/3/2011**

**Fig. 7: Percent distribution of AFP cases according to the timeliness of detection by states, Northern states, 2010**



**Fig. 8: Percent distribution of AFP cases according to the timeliness of detection by states, Northern states, 2011\***



\* Up to 6/3/2011

■ Early detection ■ Moderate detection ■ Late detection

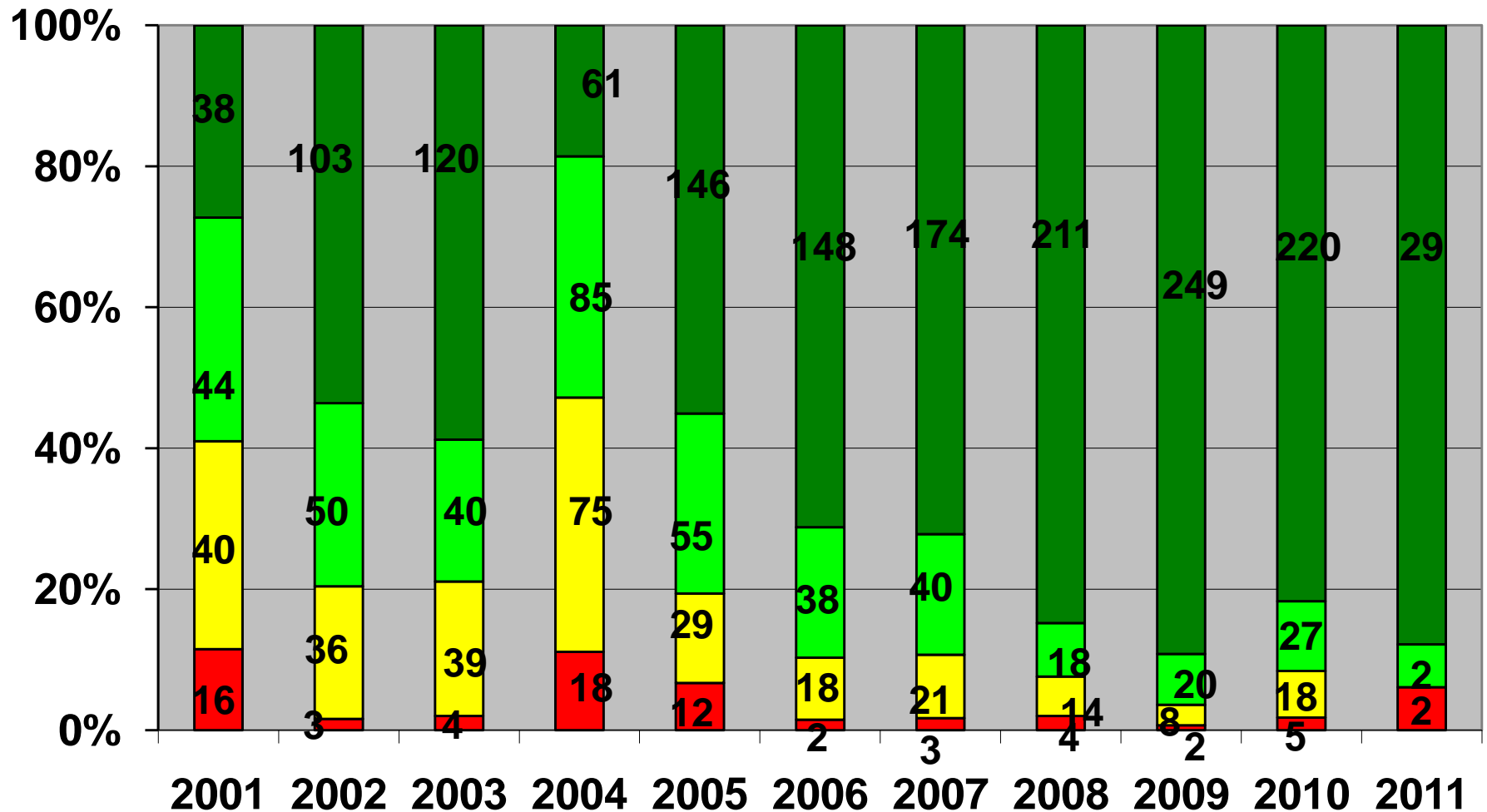
# Table 1. Major AFP surveillance performance indicators, Northern States, 2010

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	355,219	20	19	1	0	0	100%	5.6	5%
Gedarif	833,767	22	22	0	0	0	95%	2.6	14%
Gezira	1,868,934	50	50	0	0	0	96%	2.7	20%
Kasala	815,721	22	22	0	0	0	95%	2.7	5%
Khartom	2,316,035	49	48	1	0	0	100%	2.1	10%
N.Darf	836,608	29	28	1	0	0	100%	3.5	18%
N.Kord	1,243,363	40	39	1	0	0	98%	3.2	15%
Northern	263,099	7	7	0	0	0	100%	2.7	14%
Red Sea	329,031	13	13	0	0	0	92%	4.0	8%
River Nile	453,525	18	18	0	0	0	94%	4.0	6%
Sennar	699,734	16	16	0	0	0	88%	2.3	25%
S.Darfur	1,689,498	35	34	1	0	0	97%	2.1	24%
S. Kord	947,711	25	25	0	0	0	100%	2.6	28%
W.Darfur	927,169	41	40	1	0	0	98%	4.4	15%
W. Nile	814,450	21	21	0	0	0	100%	2.6	14%
<b>Total</b>	<b>14,393,864</b>	<b>408</b>	<b>402</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>97%</b>	<b>2.8</b>	<b>15%</b>

**Table 2. Major AFP surveillance performance indicators, Northern States, up to 6/3/2011**

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	365,591	4	3	1	0	0	100%	6.3	0%
Gedarif	860,364	4	0	4	0	0	100%	2.7	0%
Gezira	1,921,077	2	1	1	0	0	100%	0.6	0%
Kasala	836,195	4	2	2	0	0	100%	2.8	0%
Khartom	2,401,033	8	8	0	0	0	100%	1.9	25%
N.Darf	863,045	3	3	0	0	0	100%	2.0	0%
N.Kord	1,262,262	2	2	0	0	0	100%	0.9	0%
Northern	267,256	1	0	1	0	0	100%	2.2	0%
Red Sea	330,018	5	3	2	0	0	100%	8.8	33%
River Nile	461,734	3	3	0	0	0	100%	3.8	0%
Sennar	717,437	4	3	1	0	0	100%	3.2	0%
S.Darfur	1,747,110	3	1	2	0	0	100%	1.0	0%
S. Kord	960,789	3	2	1	0	0	100%	1.8	0%
W.Darfur	949,143	3	1	2	0	0	100%	1.8	0%
W. Nile	834,567	3	3	0	0	0	100%	2.1	0%
<b>Total</b>	<b>14,777,621</b>	<b>52</b>	<b>35</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>2.0</b>	<b>9%</b>

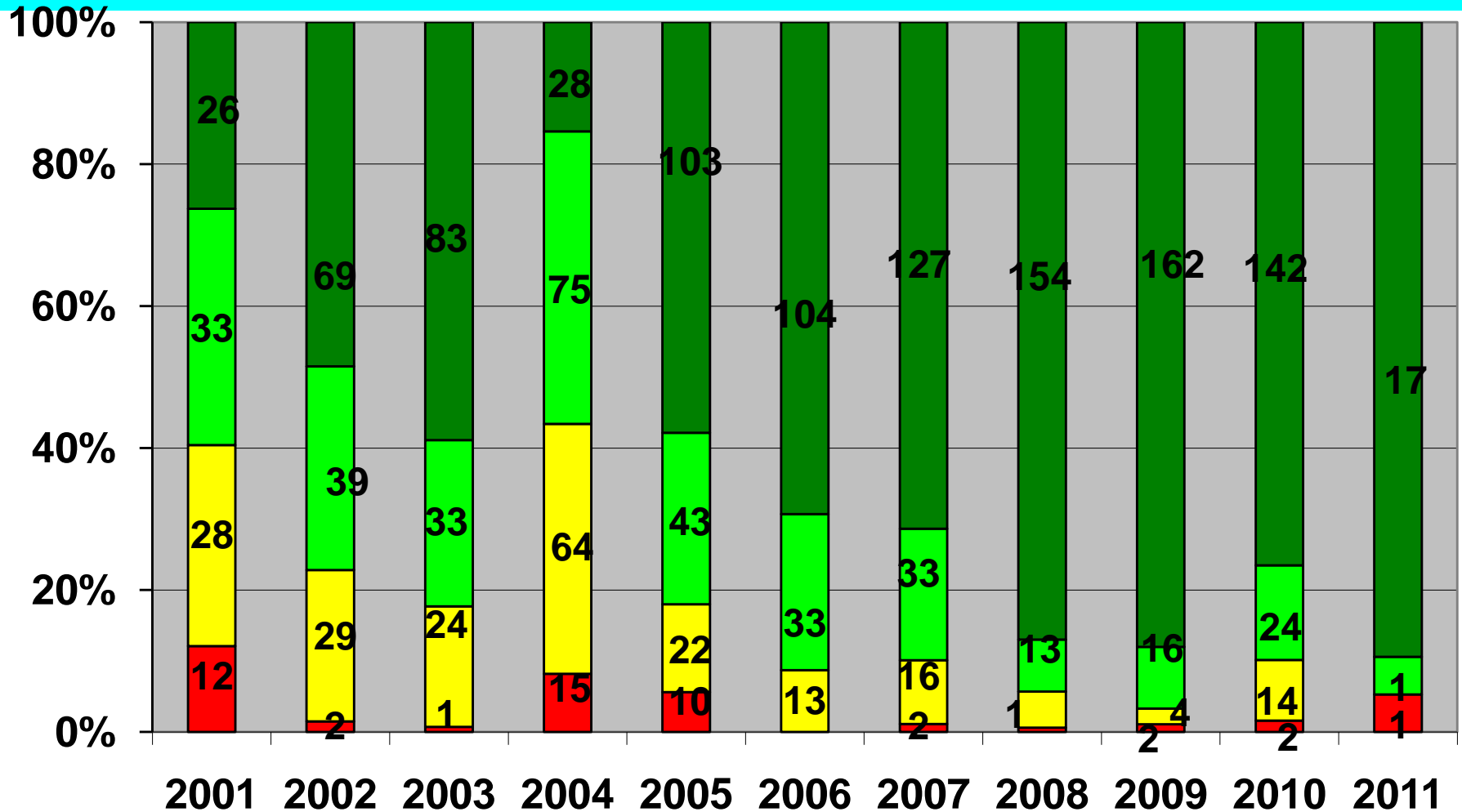
**Fig. 8: Percent distribution of AFP cases < 60 months by number of OPV doses, North Sudan 2001-2011\***



■ 0 OPV doses   
 ■ '1-3 OPV doses   
 ■ '4-6 OPV doses   
 ■ 7+ OPV doses

\* Up to 6/3/2011

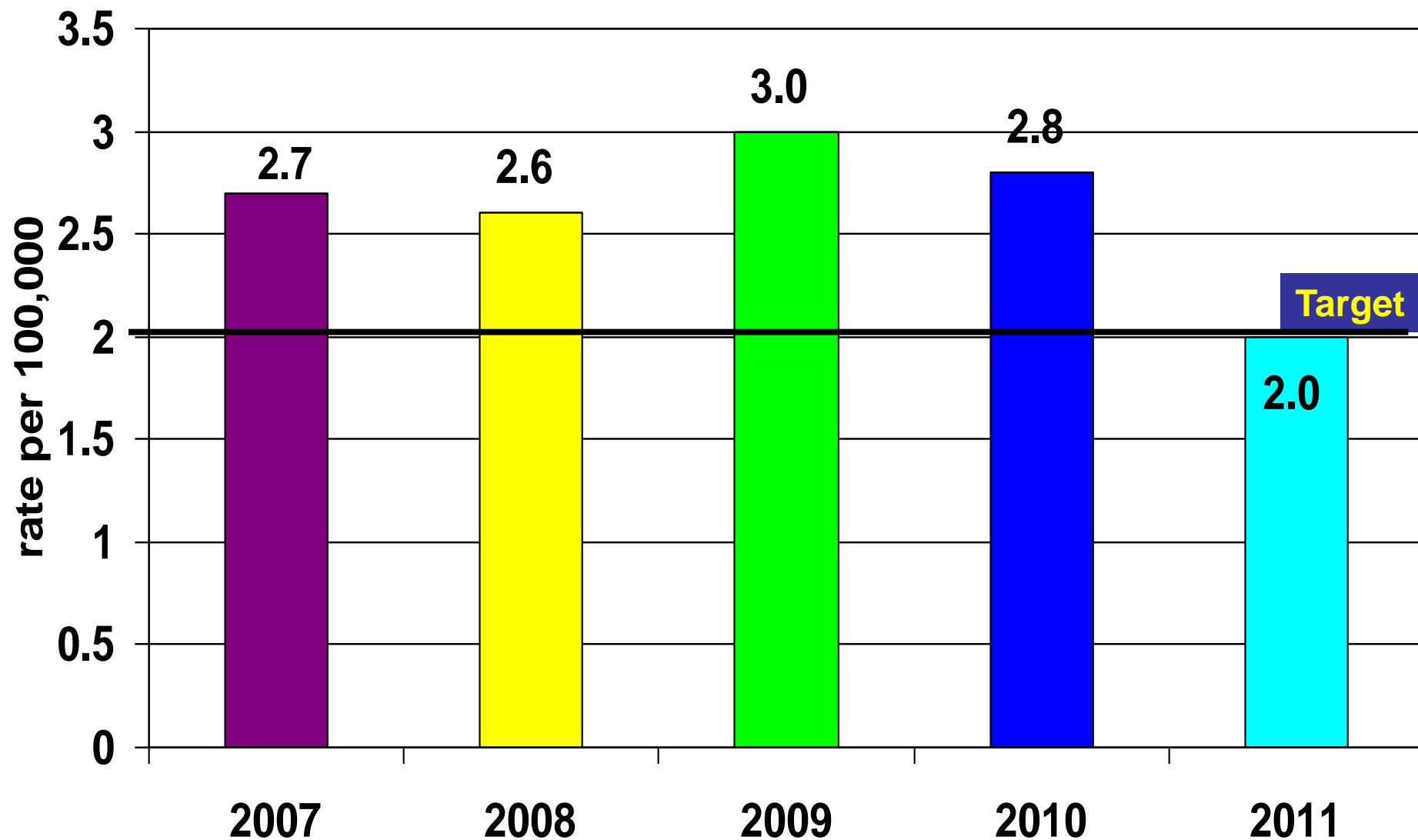
**Fig. 9: No. & percent distribution of AFP cases 6-36 months by number of OPV doses, North Sudan 2001-2011\***



■ 0 OPV doses   
 ■ '1-3 OPV doses   
 ■ '4-6 OPV doses   
 ■ 7+ OPV doses

\* Up to 6/3/2011

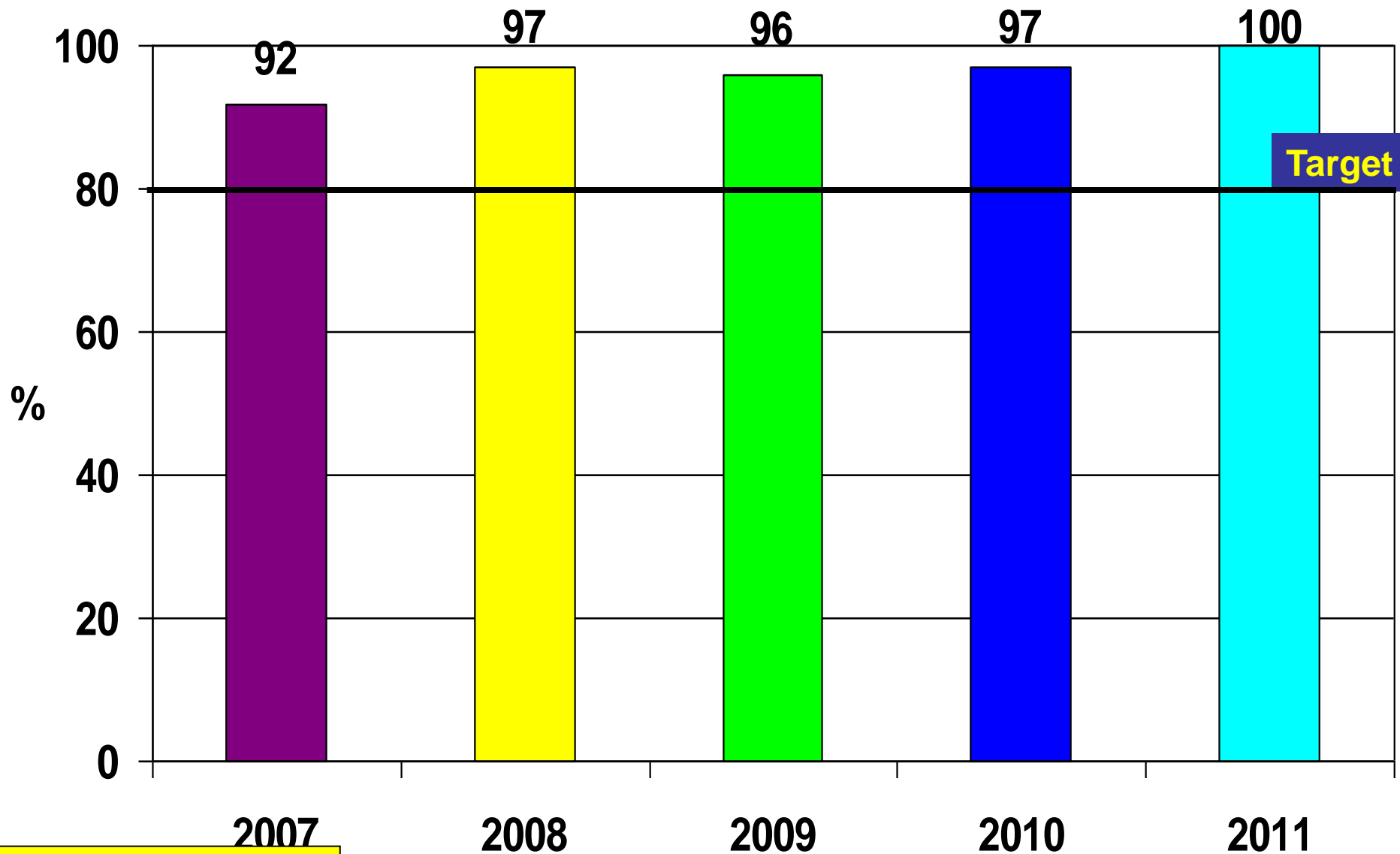
**Fig. 10: Non-Polio AFP rate per 100,000 children under 15 years of age, North Sudan, 2007 – 2011\***



\* Up to 6/3/2011

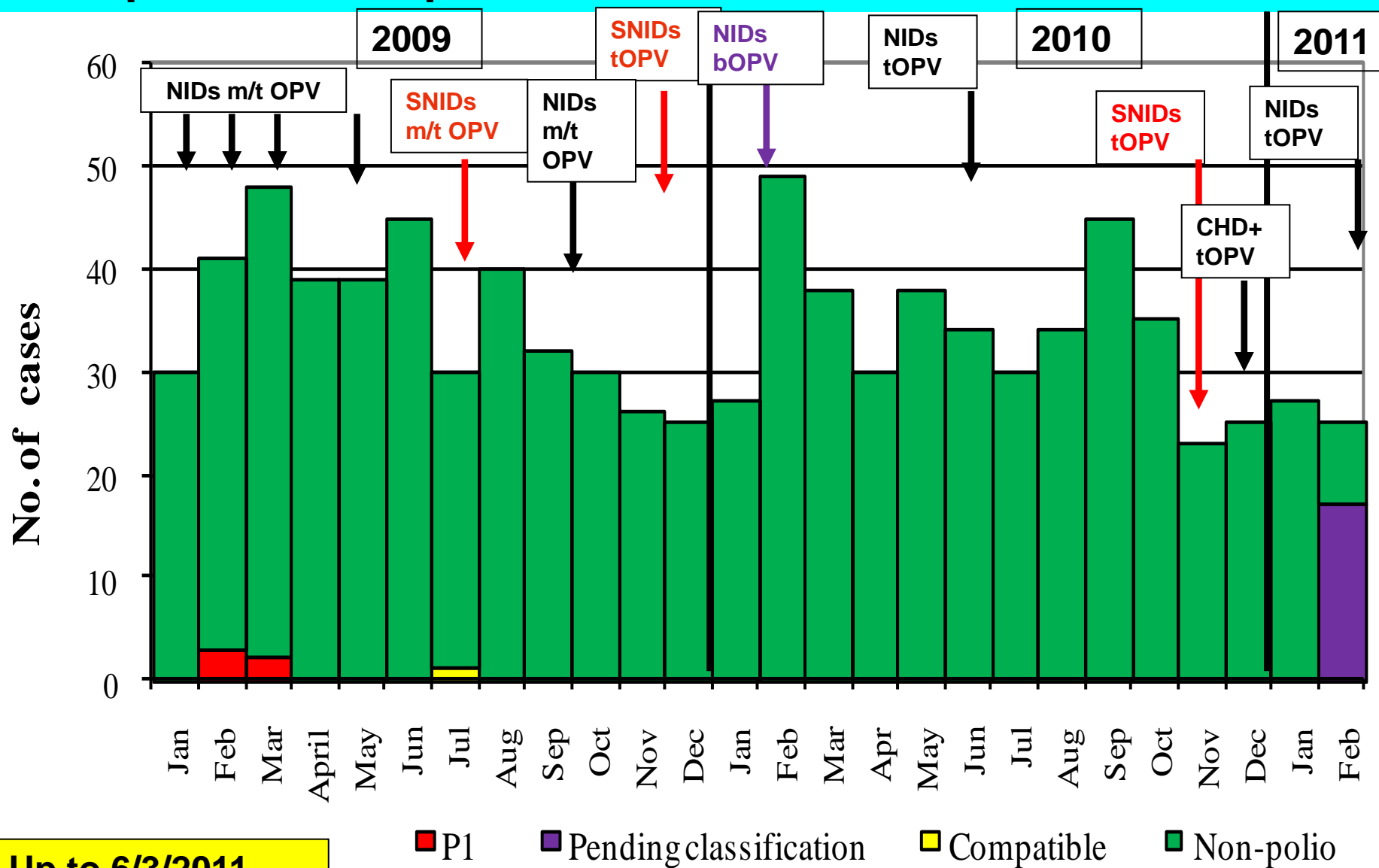
# Fig. 11: Adequate stool collection rate

## North Sudan, 2007 – 2011\*



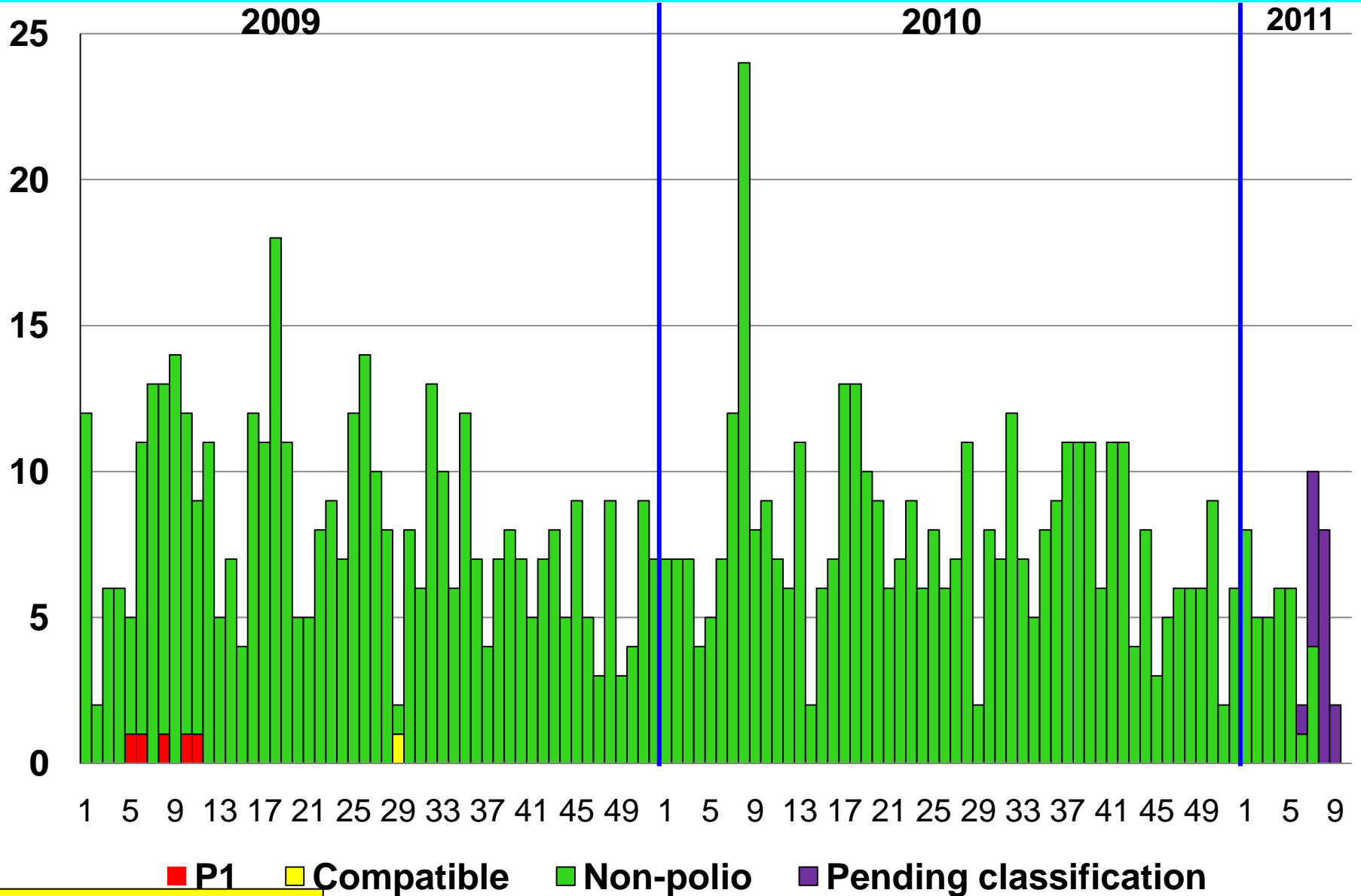
\* Up to 6/3/2011

**Fig. 12: Distribution of polio and non-polio AFP Cases by classification, month of onset & SIA response to the poliovirus importation in North Sudan 2008-2011\***



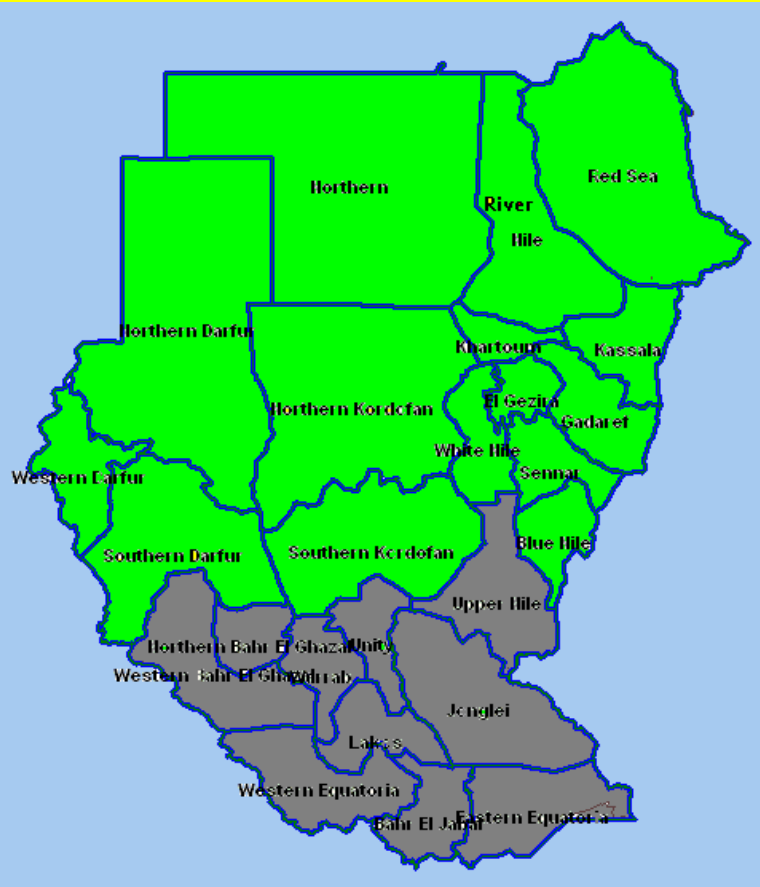
\* Up to 6/3/2011

# Fig. 13: Distribution of AFP cases by classification and week of onset, North Sudan 2008 – 2011\*

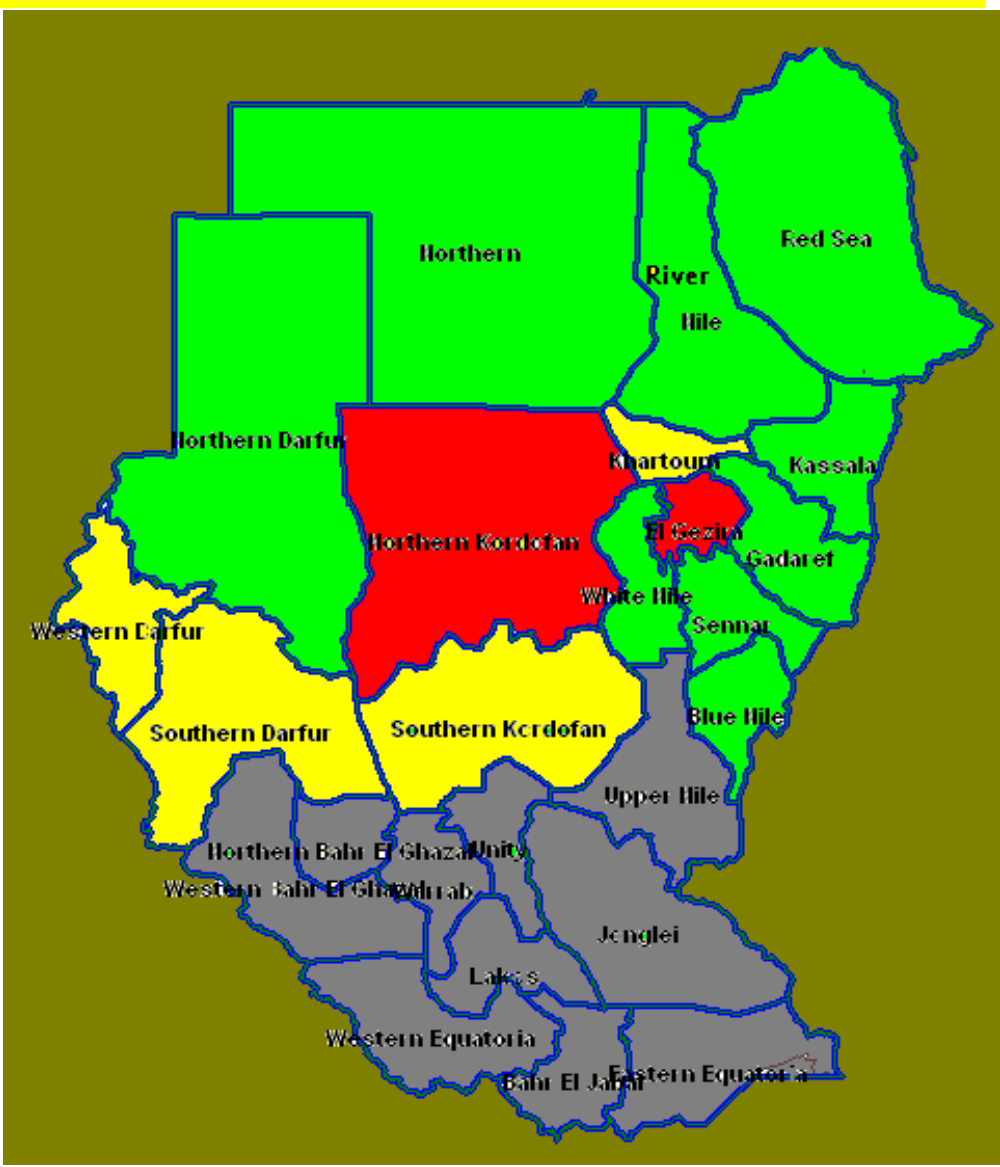


\* Up to 6/3/2011

**Map 3. Non-polio AFP rate by state, 2010**



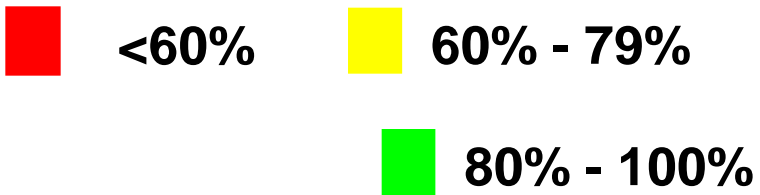
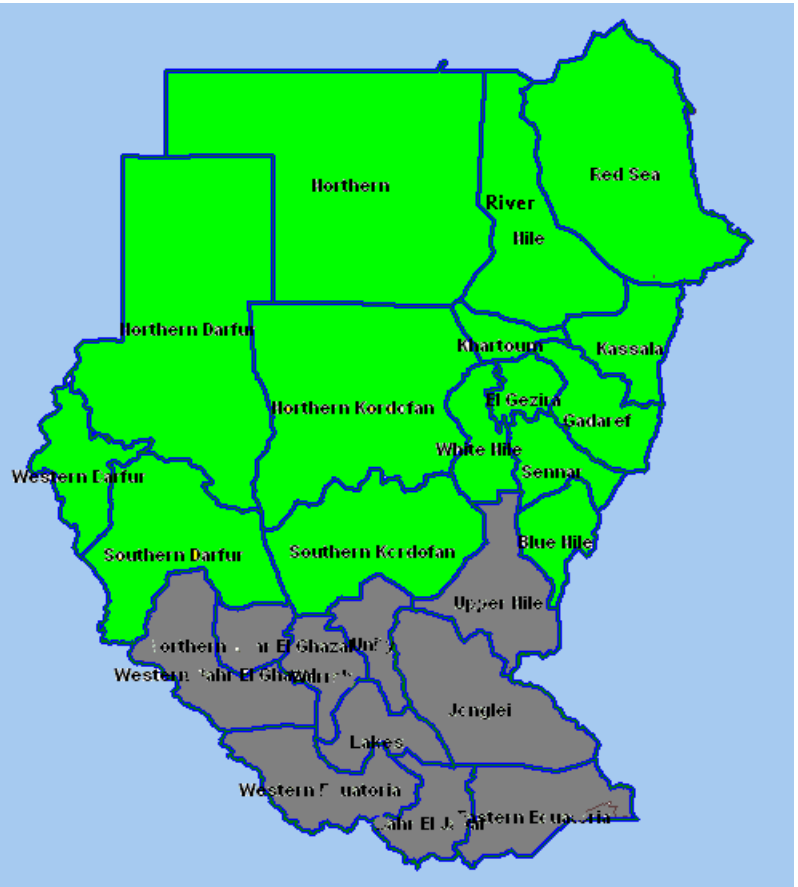
**Map 4. Annualized Non-polio AFP rate by state 2011\***



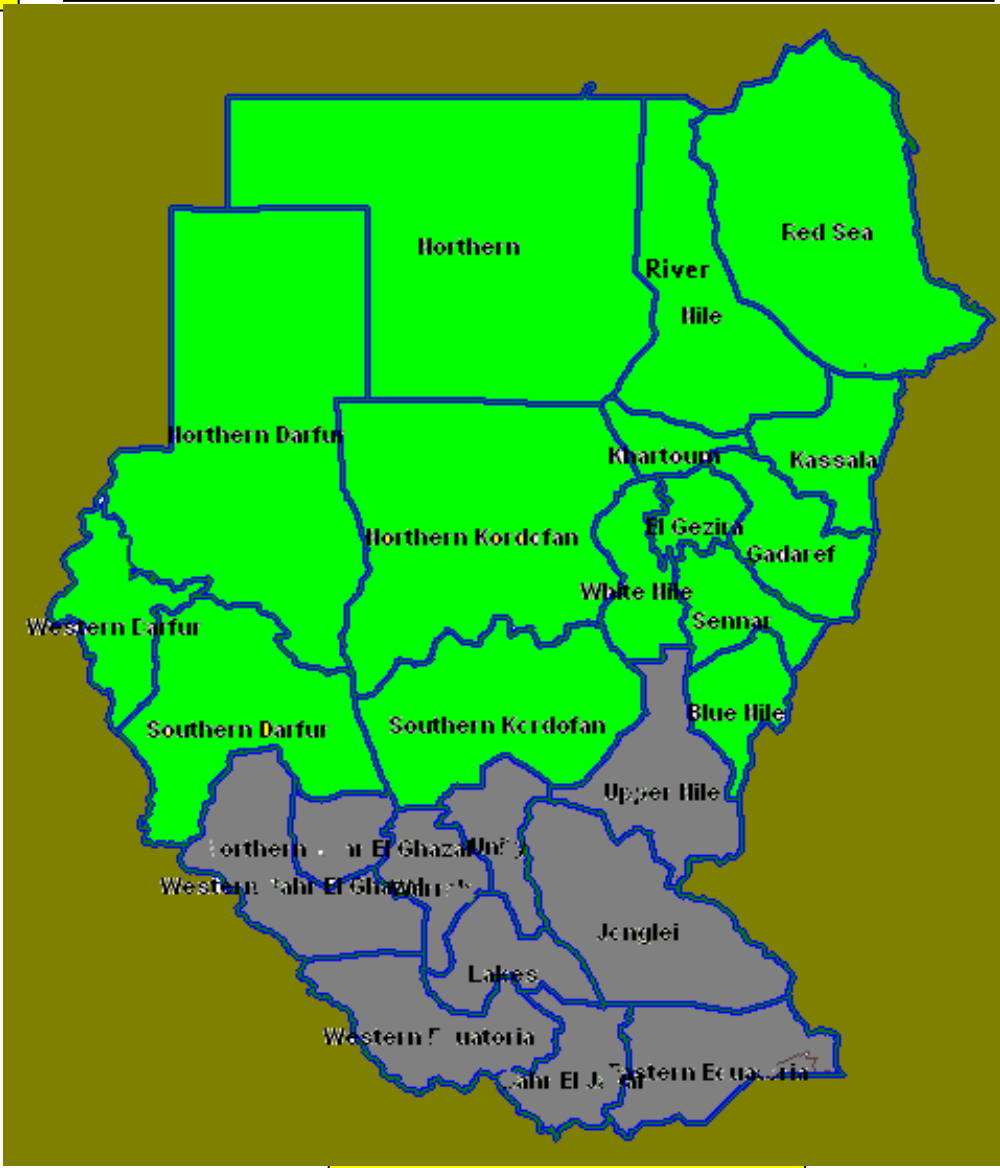
- <1 per 100,000
- 1-1.9 per 100,000
- 2 or more per 100,000
- No cases reported yet!

**\* Up to 6/3/2011**

**Map 5. Percent distribution of AFP cases having adequate stool samples by states, 2010**



**Map 6. Percent distribution of AFP cases having adequate stool samples by state, 2011\***



**\* Up to 6/3/2011**

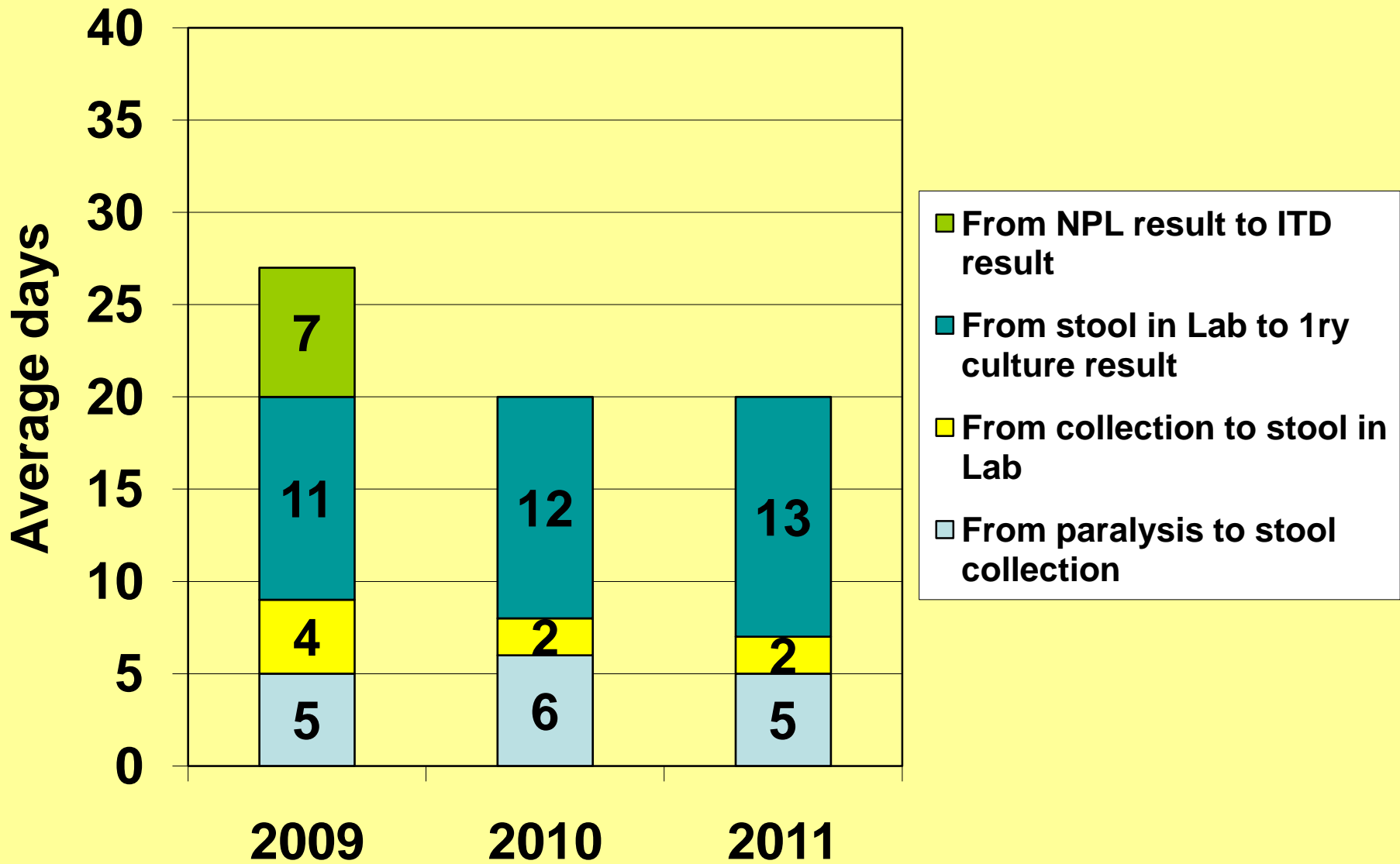
**Table 4. National polio lab performance indicators  
North Sudan, 2009-2011**

<b>Indicator</b>	<b>2009 up to W9</b>	<b>2010 up to W9</b>	<b>2011 up to W9</b>
<b>AFP cases with samples tested in NPL</b>	<b>52</b>	<b>72</b>	<b>52</b>
<b>Cases with wild poliovirus (imported P1)</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>Cases with wild poliovirus (imported P3)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cases with non-polio enterovirus</b>	<b>3%</b>	<b>13%</b>	<b>9%</b>
<b>SL viruses No. &amp; (%) from AFP cases</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Median days from the time of samples received in the lab to primary culture report or L20B result</b>	<b>11 days</b>	<b>12 days</b>	<b>13 days</b>
<b>Number of samples from the AFP contacts tested in the NPL</b>	<b>50</b>	<b>23</b>	<b>28</b>
<b>Contacts with non-polio enterovirus</b>	<b>10%</b>	<b>12%</b>	<b>0%</b>
<b>Sabin like viruses No. &amp; (%) from contacts</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>NSL like viruses from contacts</b>	<b>1</b>	<b>0</b>	<b>0</b>

**Table 5. Polio lab performance  
North Sudan, 2009 and 2011**

<b>Week of onset</b>	<b>Total AFP Cases with samples</b>	<b>AFP Cases under processes</b>	<b>L20B +ve pending ITD</b>	<b>Negative cases</b>	<b>NPEV positive</b>	<b>% NPEV</b>	<b>Result reported within 14 days</b>	<b>Arrival within 3 days of being collected</b>	<b>Arrival within 3 days of being sent</b>
<b>2009 up to W9</b>	<b>52</b>	<b>22</b>	<b>0</b>	<b>29</b>	<b>1</b>	<b>3%</b>	<b>93%</b>	<b>73%</b>	<b>100%</b>
<b>2010 up to W9</b>	<b>72</b>	<b>19</b>	<b>0</b>	<b>46</b>	<b>7</b>	<b>13%</b>	<b>100%</b>	<b>88.6%</b>	<b>100%</b>
<b>2011 up to W9</b>	<b>52</b>	<b>17</b>	<b>0</b>	<b>32</b>	<b>3</b>	<b>9%</b>	<b>86%</b>	<b>88%</b>	<b>100%</b>

# Fig. 14: AFP Specimens' timeliness, NPL 2009-2011\*



\* Up to 6/3/2011