

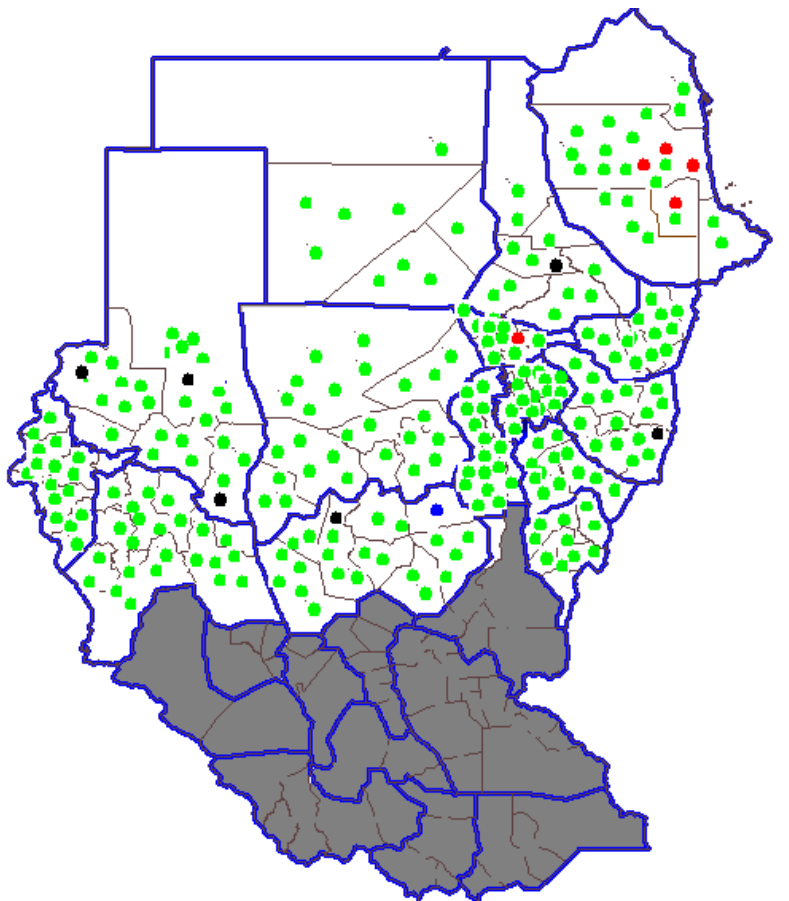
# **Sudan Weekly AFP Surveillance Report**

**Week 52**

**(Ending on 31 December 2010)**

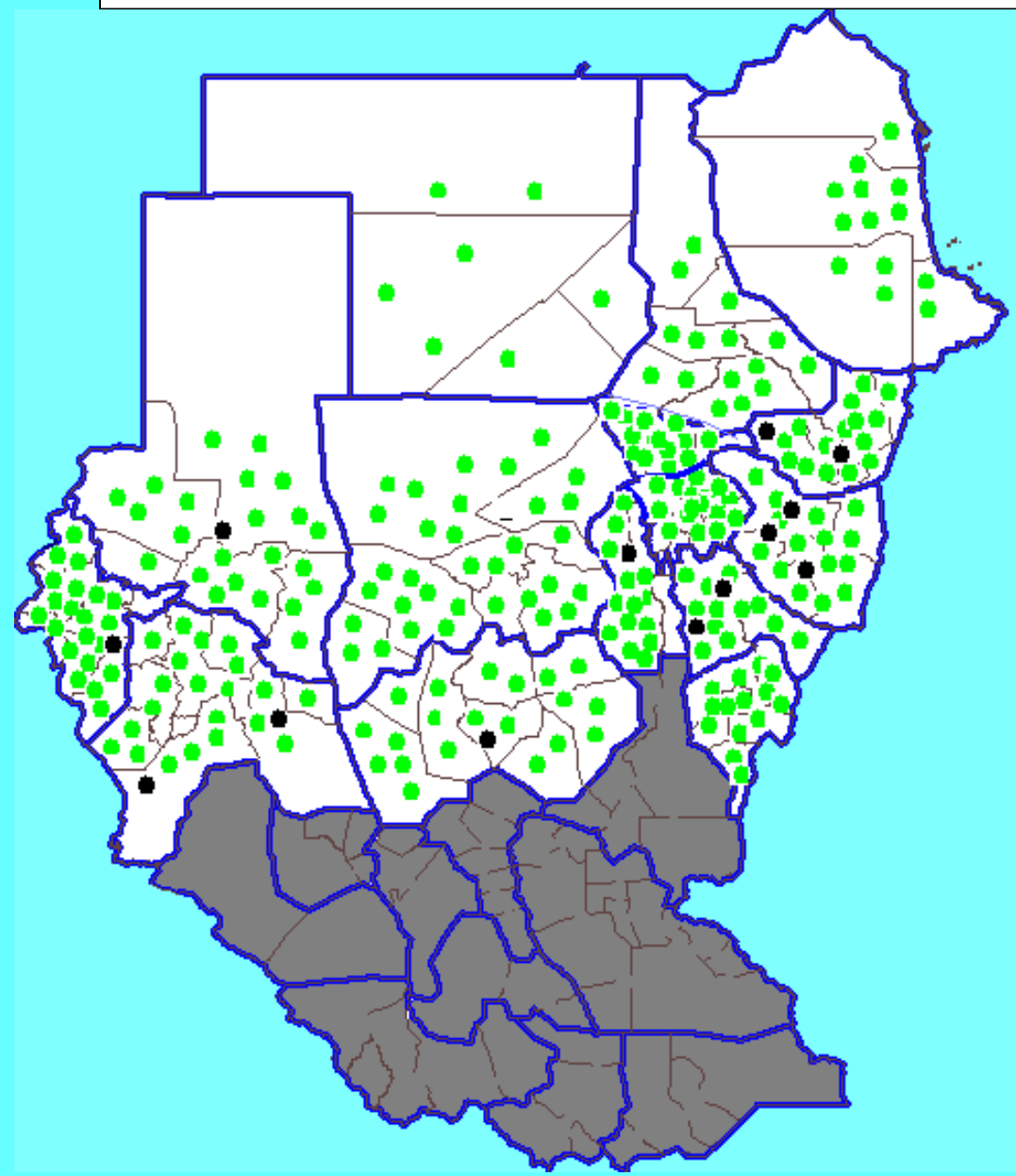
**National AFP  
Surveillance system  
Sudan**

**Map 1. Distribution of AFP cases by classification, N Sudan, 2009**



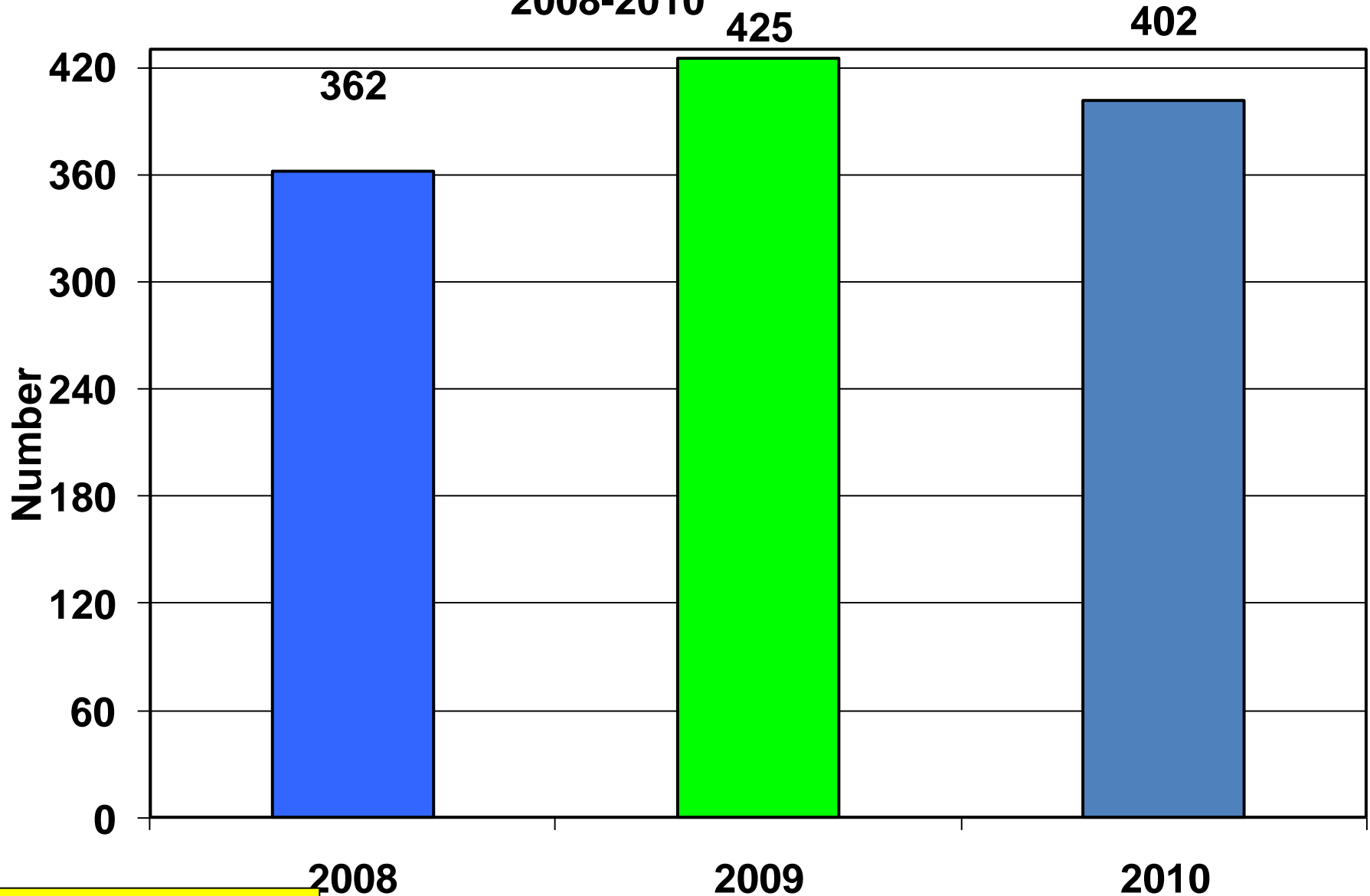
- Polio case P1
- Compatible case
- Non-polio AFP
- Pending classification

**Map 2. Distribution of AFP cases by classification, N Sudan up to week 52 2010**



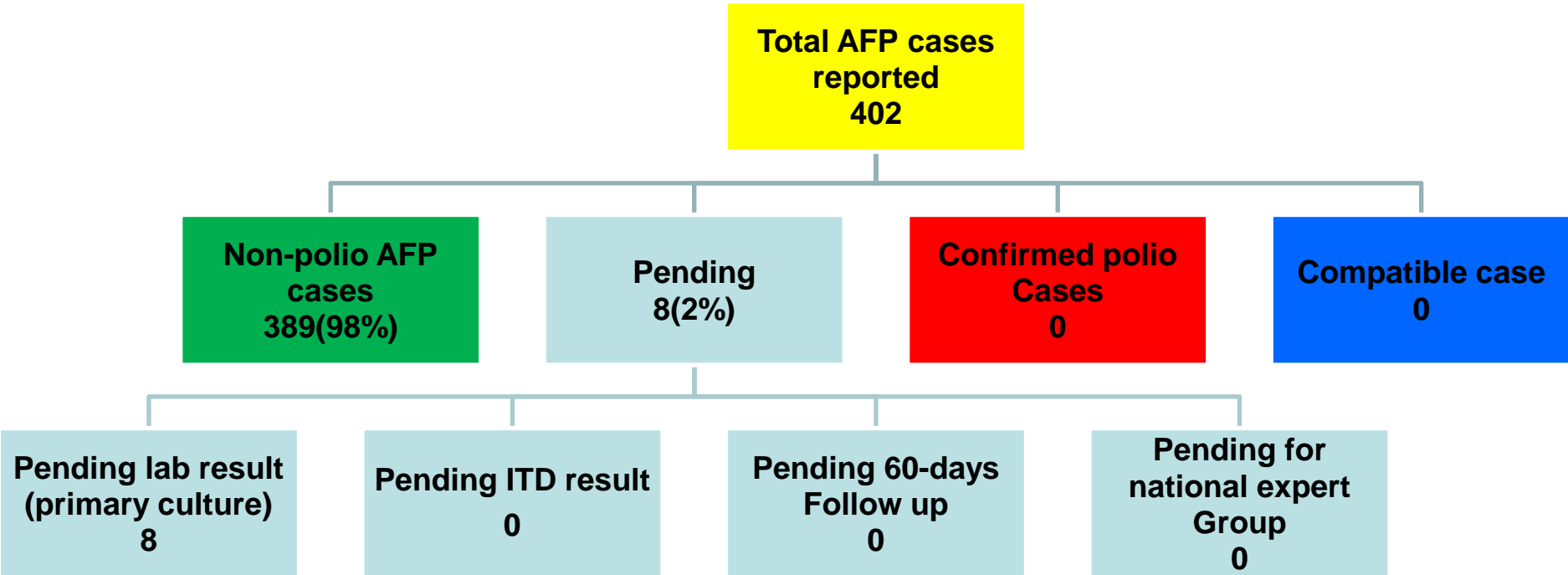
**Fig. 1: Total AFP cases, North Sudan**

**2008-2010\***



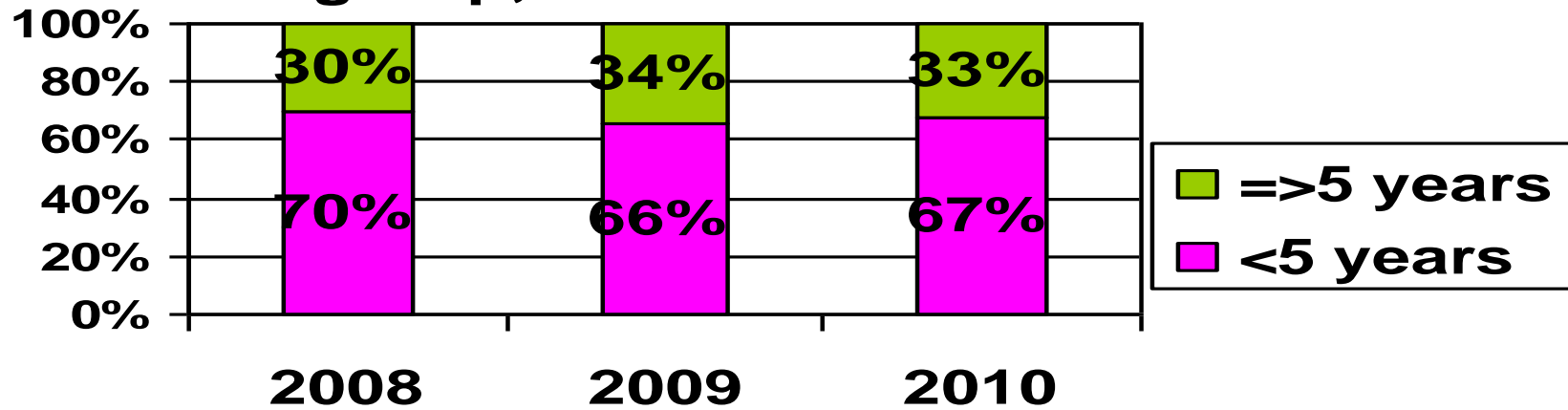
**\* Up to 31/12/2010**

**Fig. 2: Total AFP cases by classification, North Sudan, 2010\***



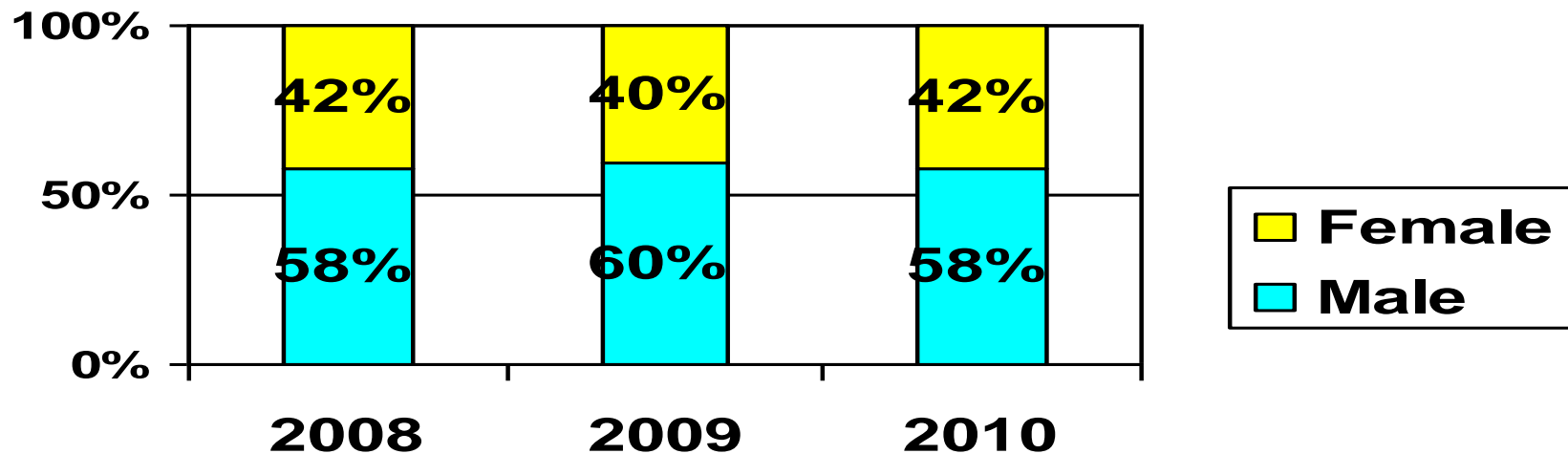
**\* Up to 31/12/2010**

**Fig. 3: North SUDAN AFP cases by age group, 2008 - 2010\***

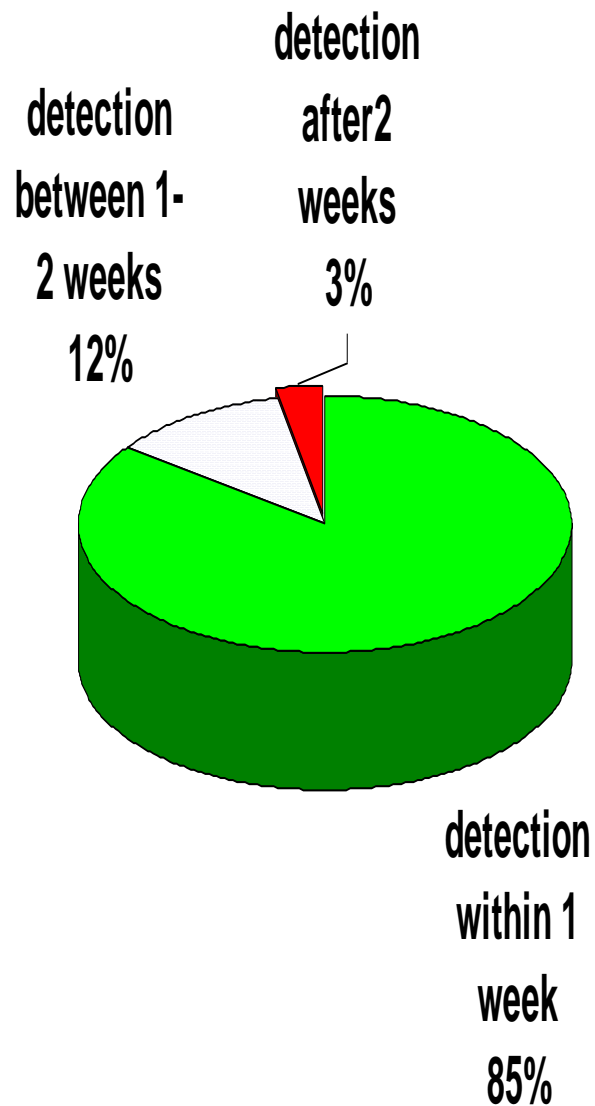


\* Up to 31/12/2010

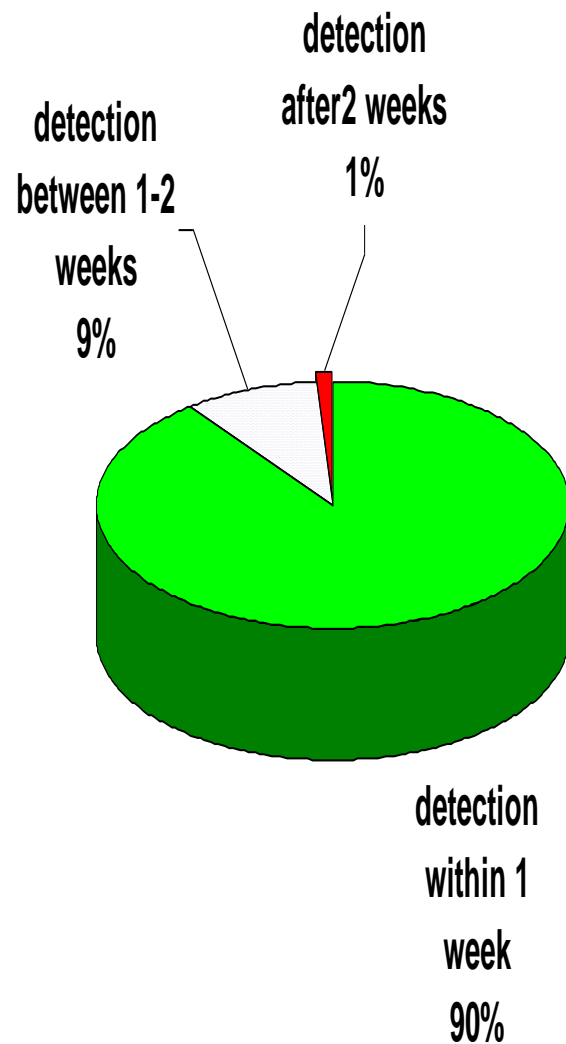
**Fig. 4: North SUDAN AFP cases by sex 2008 - 2010\***



**Fig. 5: Percent distribution of AFP cases by time of detection, North Sudan, 2009**

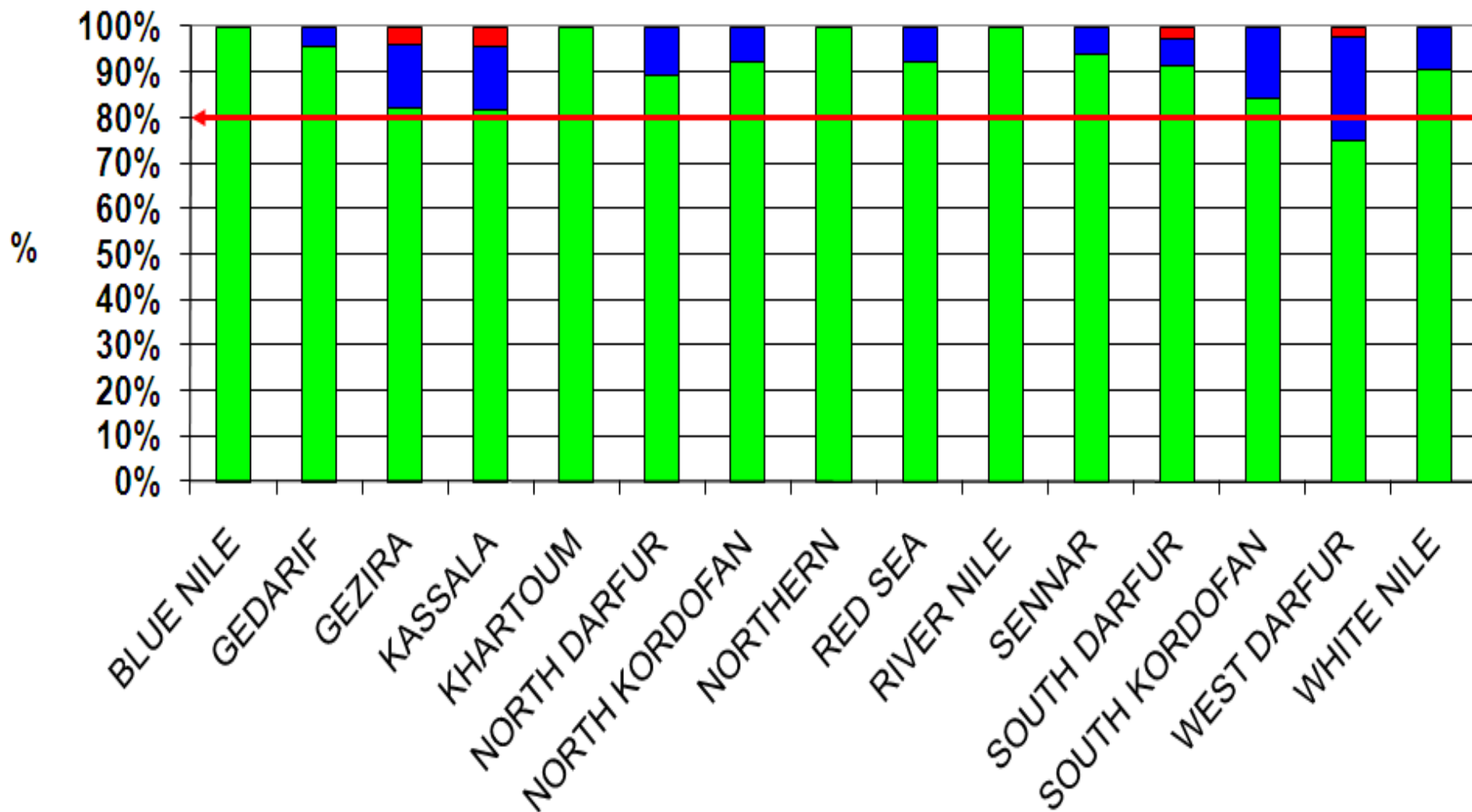


**Fig. 6: Percent distribution of AFP cases by time of detection, North Sudan, 2010\***



**\* Up to 31/12/2010**

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



\* Up to 31/12/2010

■ Early detection ■ Moderate detection ■ Late detection

**Table 1. Major AFP surveillance performance indicators, Northern States, 2009**

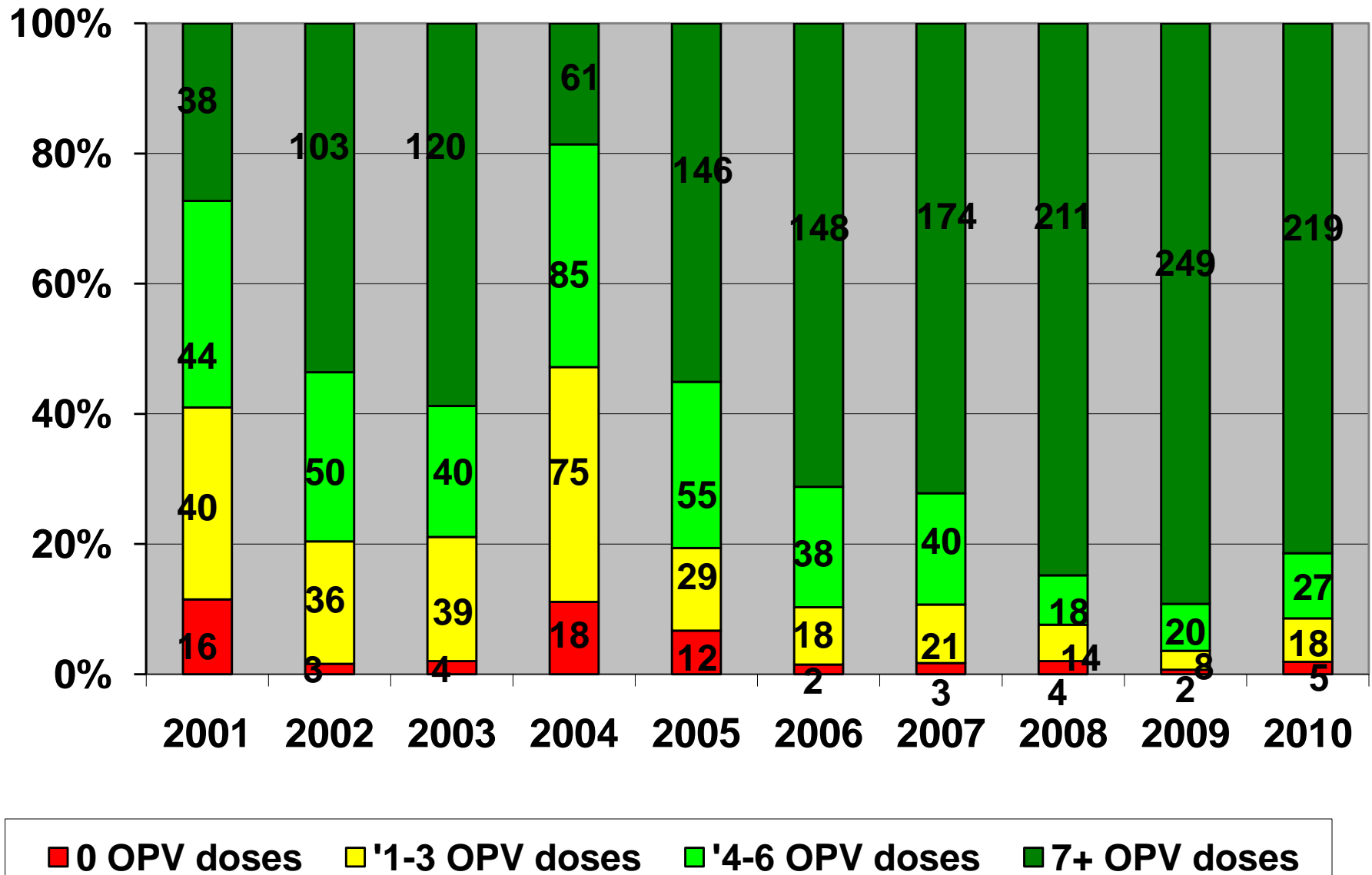
State	U 15 yrs population	Total reported AFP cases	Non-polio AFP cases	Pending classification	Polio cases	Compatible cases	% Adequate stools	Annualized AFP rate	% NPEV
B. Nile	345,141	12	12	0	0	0	100%	3.5	33%
Gedarif	807,992	20	20	0	0	0	100%	2.5	15%
Gezira	1,818,206	56	56	0	0	0	93%	3.1	11%
Kasala	795,748	21	21	0	0	0	100%	2.6	10%
Khartom	2,234,046	54	53	0	1	0	98%	2.4	17%
N.Darf	810,981	31	31	0	0	0	90%	3.8	10%
N.Kord	1,224,747	39	39	0	0	0	95%	3.2	13%
Northern	259,007	9	9	0	0	0	100%	3.5	33%
Red Sea	328,047	26	22	0	4	0	96%	6.7	8%
River Nile	445,463	14	14	0	0	0	93%	3.1	0%
Sennar	682,468	16	16	0	0	0	94%	2.3	13%
S.Darfur	1,633,786	38	38	0	0	0	100%	2.3	8%
S. Kord	934,811	31	30	0	0	1	97%	3.3	6%
W.Darfur	905,704	21	21	0	0	0	89%	2.3	5%
W. Nile	794,818	37	37	0	0	0	95%	4.7	22%
<b>Total</b>	<b>16,525,252</b>	<b>425</b>	<b>419</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>96%</b>	<b>3.0</b>	<b>13%</b>



## Table 2. Major AFP surveillance performance indicators, Northern States, up to 2/1/2011

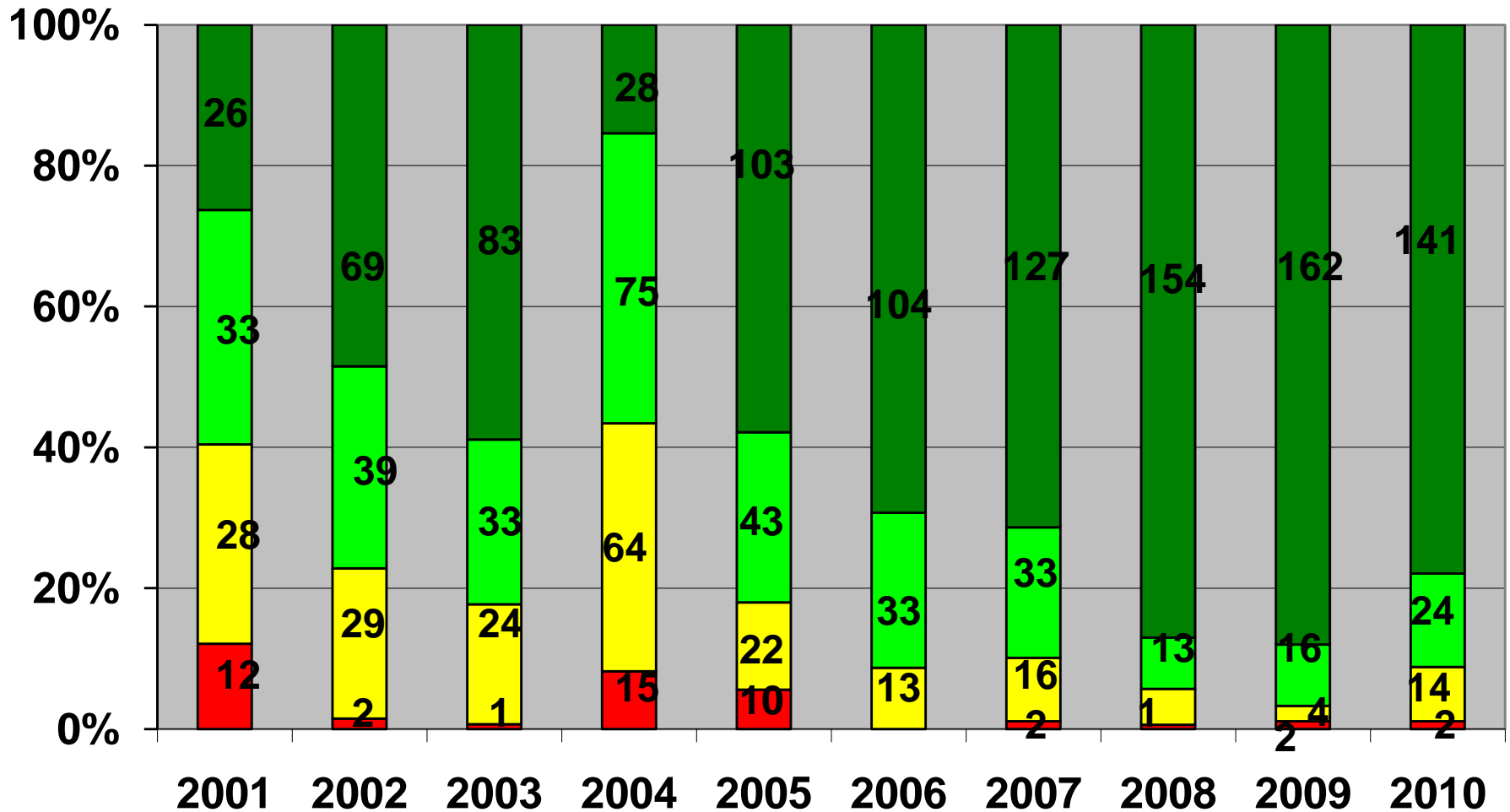
State	U 15 yrs population	Total reported AFP cases	Non-polio AFP cases	Pending classification	Polio cases	Compatible cases	% Adequate stools	Annualized AFP rate	% NPEV
B. Nile	355,219	19	19	0	0	0	100%	5.3	5%
Gedarif	833,767	22	19	3	0	0	95%	2.6	11%
Gezira	1,868,934	50	50	0	0	0	96%	2.7	20%
Kasala	815,721	22	21	1	0	0	95%	2.7	0%
Khartom	2,316,035	48	48	0	0	0	100%	2.1	10%
N.Darf	836,608	28	27	1	0	0	100%	3.3	19%
N.Kord	1,243,363	39	39	0	0	0	97%	3.1	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	34	33	1	0	0	97%	2.0	24%
S. Kord	947,711	25	24	1	0	0	100%	2.6	29%
W.Darfur	927,169	40	40	0	0	0	98%	4.3	15%
W. Nile	814,450	21	20	1	0	0	100%	2.6	15%
<b>Total</b>	<b>14,393,864</b>	<b>402</b>	<b>394</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>97%</b>	<b>2.8</b>	<b>15%</b>

**Fig. 8: Percent distribution of AFP cases < 60 months by number of OPV doses, North Sudan 2001-2010\***



\* Up to 31/12/2010

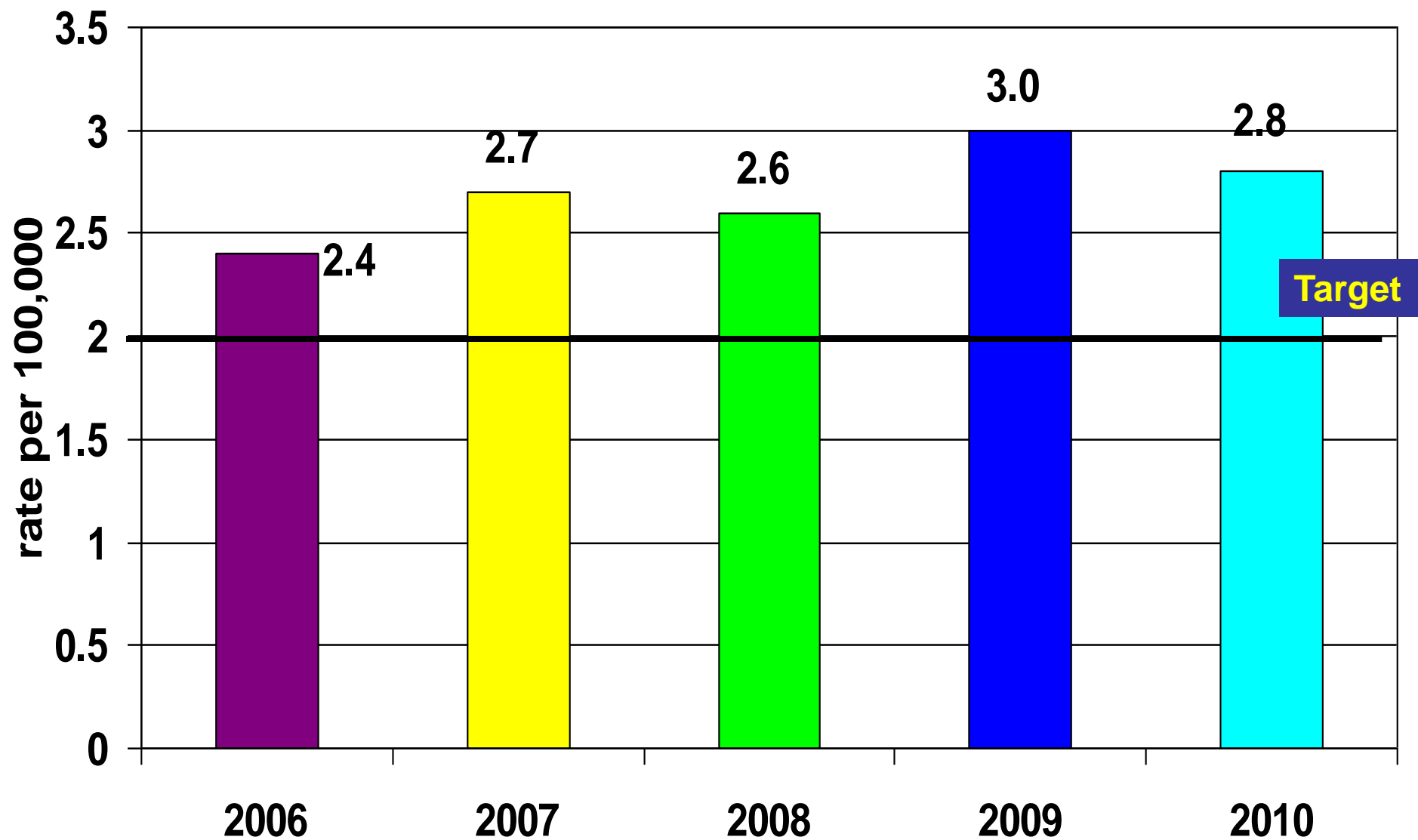
**Fig. 9: No. & percent distribution of AFP cases 6-36 months by number of OPV doses, North Sudan 2001-2010\***



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

\* Up to 31/12/2010

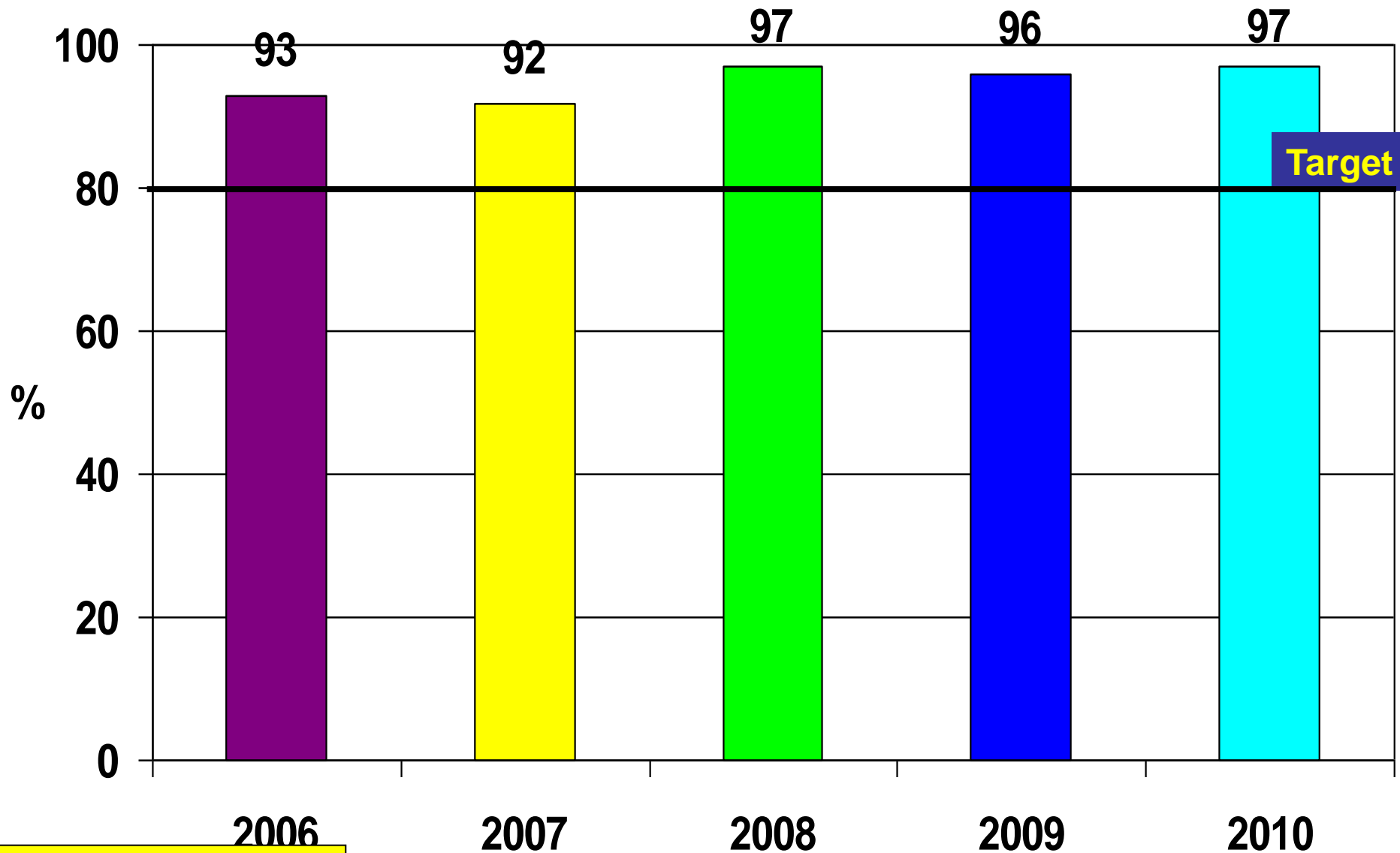
**Fig. 10: Non-Polio AFP rate per 100,000 children under 15 years of age, North Sudan, 2006 – 2010\***



\* Up to 31/12/2010

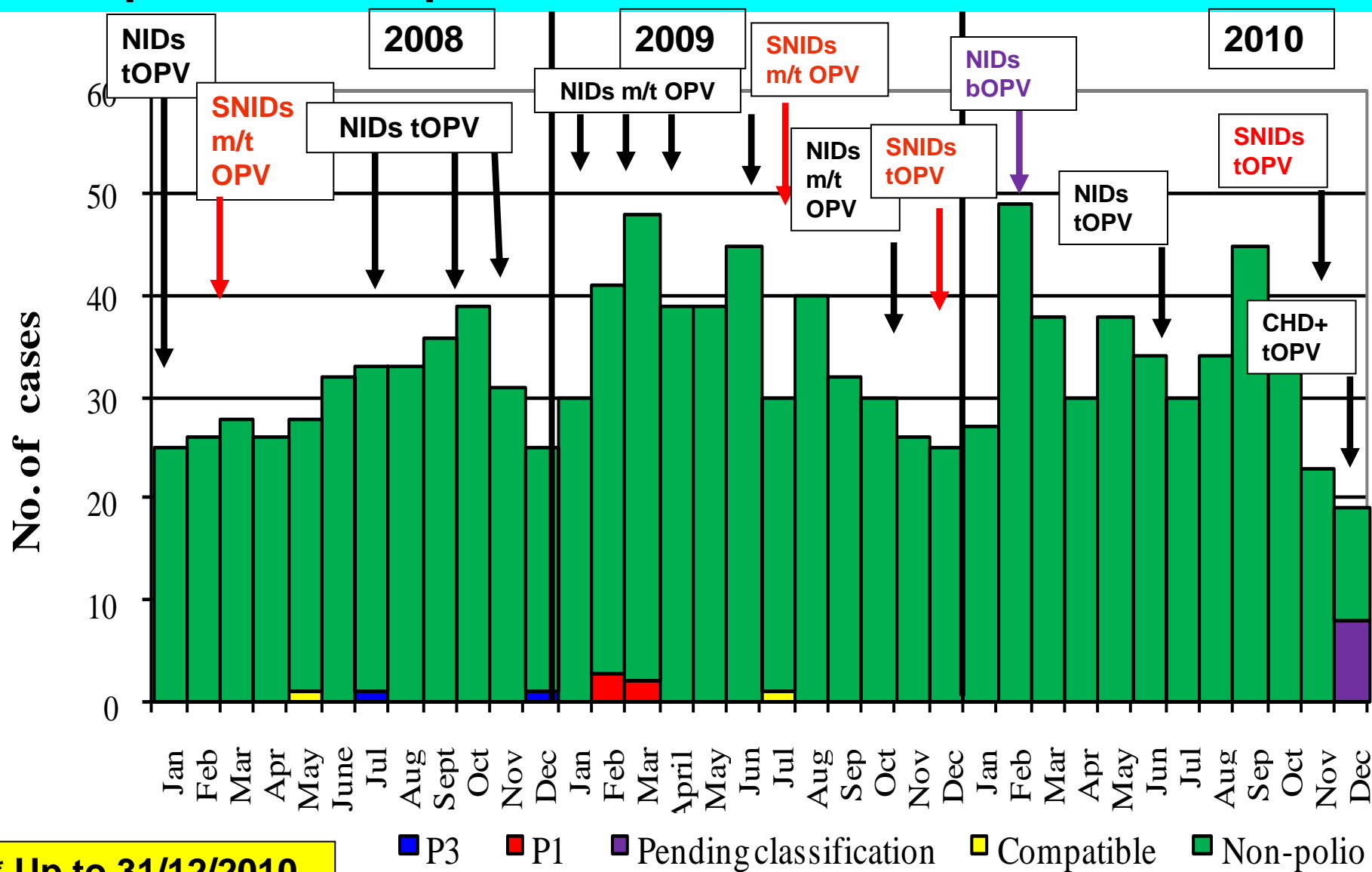
# Fig. 11: Adequate stool collection rate

## North Sudan, 2006 – 2010\*



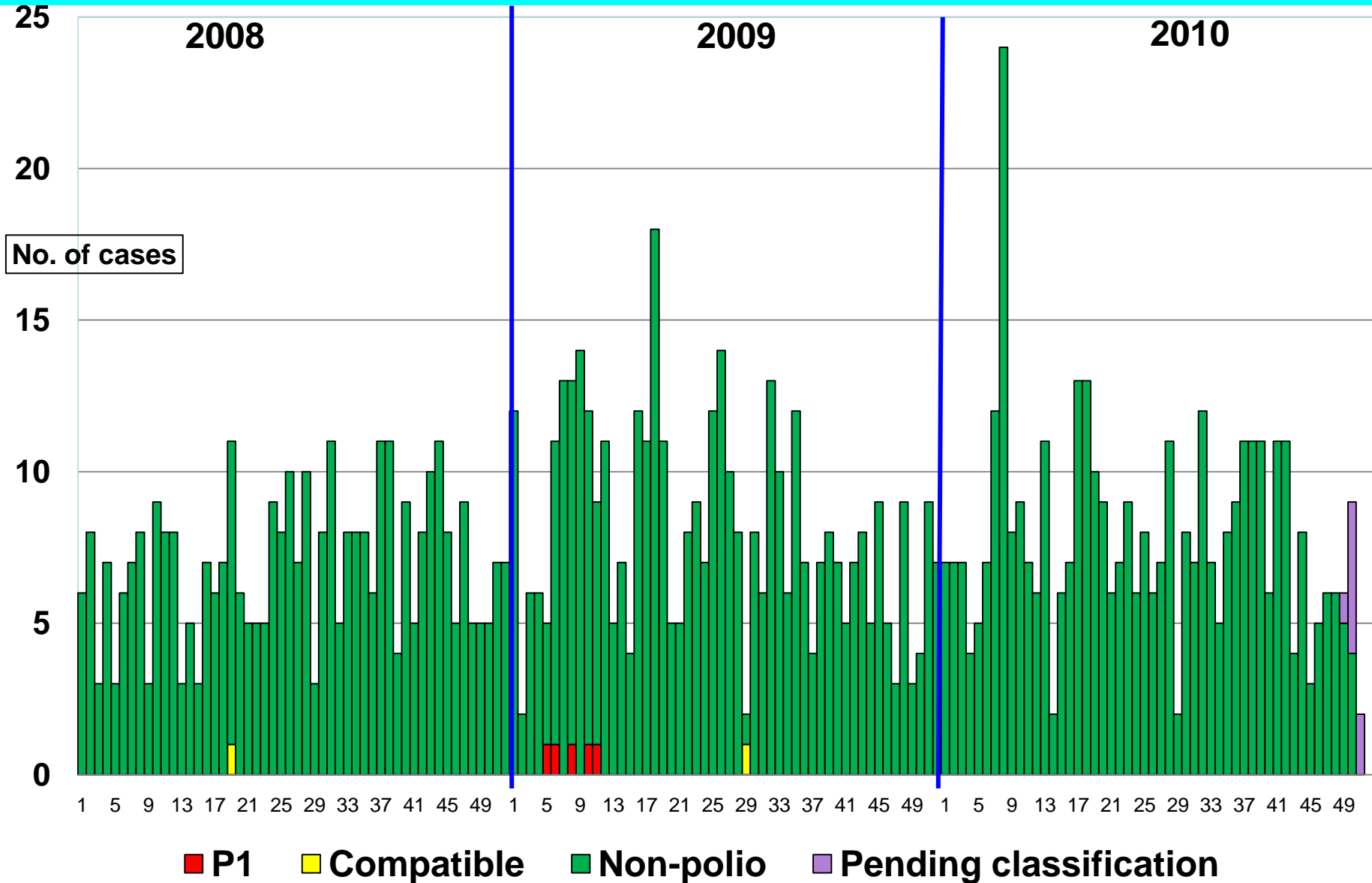
\* Up to 31/12/2010

# Fig. 12: Distribution of polio and non-polio AFP Cases by classification, month of onset & SIA response to the poliovirus importation in North Sudan 2008-2010\*



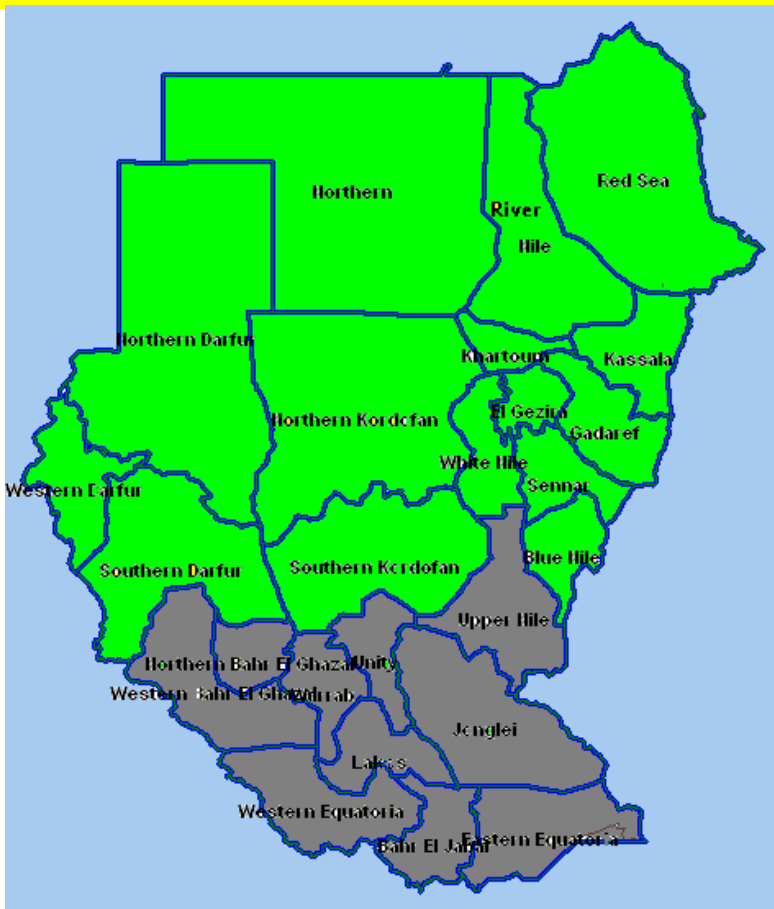
\* Up to 31/12/2010

# Fig. 13: Distribution of AFP cases by classification and week of onset, North Sudan 2008 – 2010\*

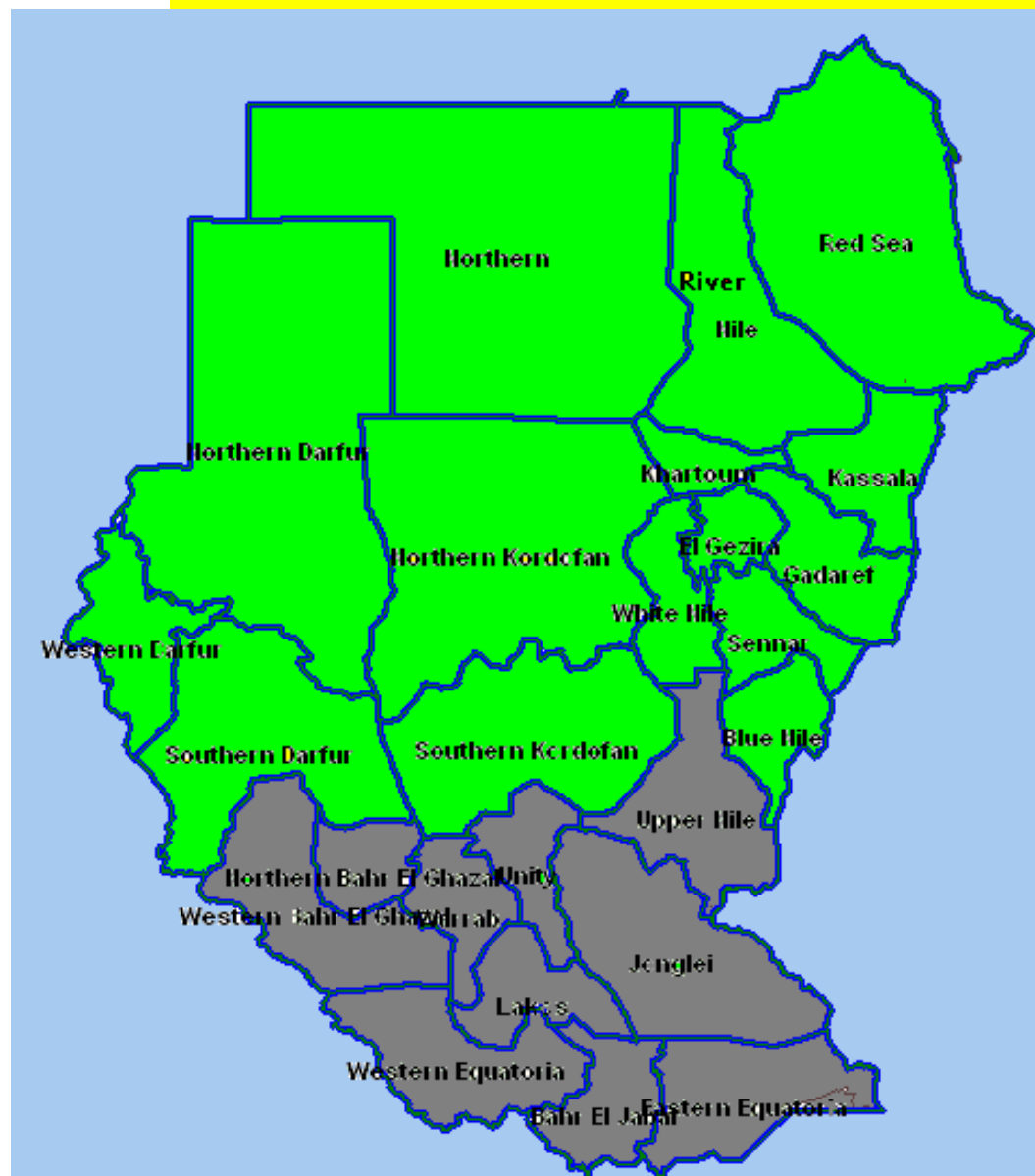


\* Up to 31/12/2010

**Map 3. Non-polio AFP rate by state, 2009**



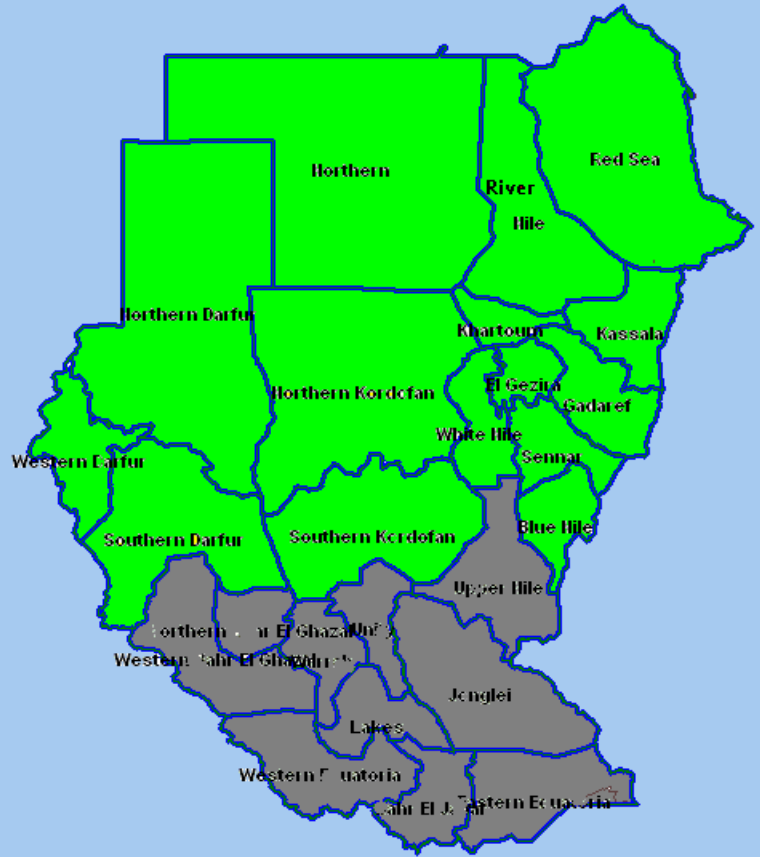
**Map 4. Annualized non-polio AFP rate by state up to Week 52, 2010**



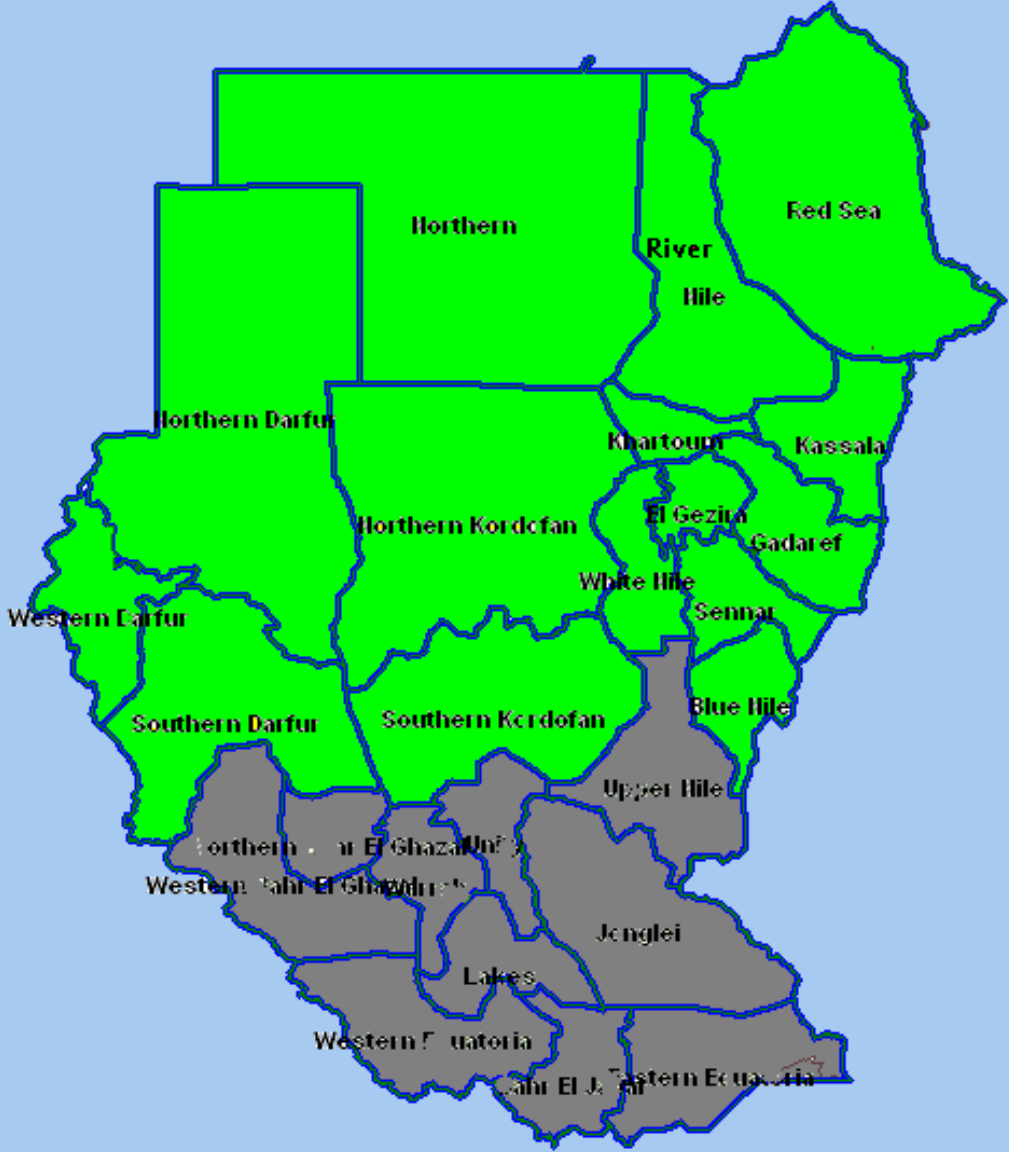
- <1 per 100,000
- 1-1.9 per 100,000
- 2 or more per 100,000



**Map 5. Percent distribution of AFP cases having adequate stool samples by states, 2009**



**Map 6. Percent distribution of AFP cases having adequate stool samples by state up to Week 52 2010**



■ <60%     
 ■ 60% - 79%  
■ 80% - 100%

## Table 4. National polio lab performance indicators North Sudan, 2008-2010

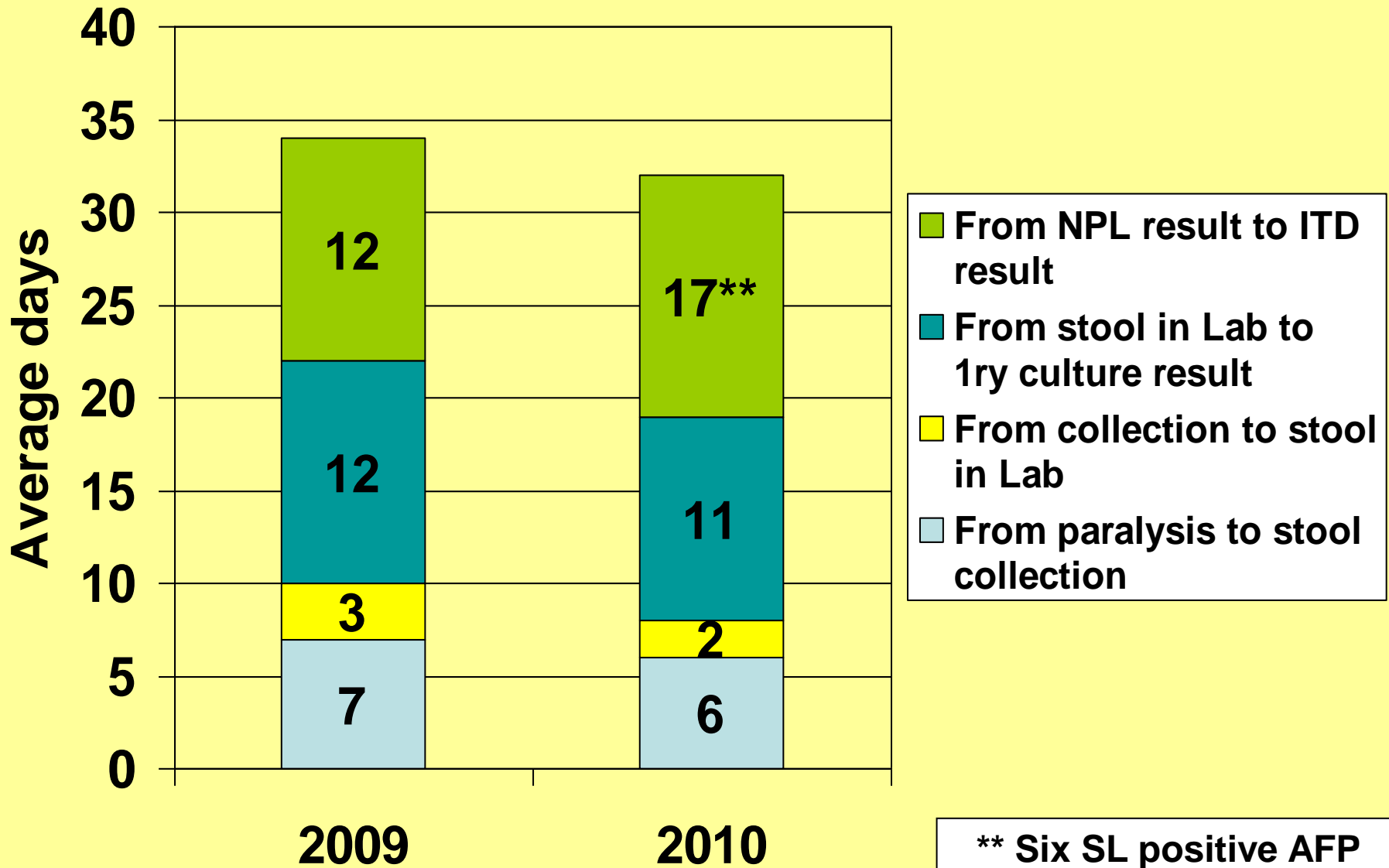
Indicator	2008	2009	2010*
AFP cases with samples tested in NPL	361	420	401
Cases with wild poliovirus (imported P1)	0	5	0
Cases with wild poliovirus (imported P3)	2	0	0
Cases with non-polio enterovirus	14%	13%	15%
SL viruses No. & (%) from AFP cases	7 (2%)	7 (1.7%)	6 (1.6%)
Median days from the time of samples received in the lab to primary culture report or L20B result	11 days	12 days	12 days
Number of samples from the AFP contacts tested in the NPL	407	488	247
Contacts with non-polio enterovirus	8.1%	8.2%	14%
Sabin like viruses No. & (%) from contacts	9(2.3%)	4(0.9)	0
NSL like viruses from contacts	0	3	0

\* Up to 31/12/2010

**Table 5. Polio lab performance  
North Sudan, 2009 and 2010**

<b>Week of onset</b>	<b>Total AFP Cases with samples</b>	<b>AFP Cases under process</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>Up to W52 2009</b>	<b>420</b>	<b>0</b>	<b>0</b>	<b>367</b>	<b>53</b>	<b>13%</b>	<b>91%</b>	<b>78%</b>	<b>97%</b>
<b>Up to W52 2010</b>	<b>401</b>	<b>8</b>	<b>0</b>	<b>333</b>	<b>60</b>	<b>15%</b>	<b>94%</b>	<b>84%</b>	<b>99%</b>

# Fig. 14: AFP Specimens' timeliness, NPL 2009-2010\*



- From NPL result to ITD result
- From stool in Lab to 1ry culture result
- From collection to stool in Lab
- From paralysis to stool collection

\*\* Six SL positive AFP cases

\* Up to 31/12/2010