



World Health  
Organization



# **Sudan Weekly AFP surveillance report**

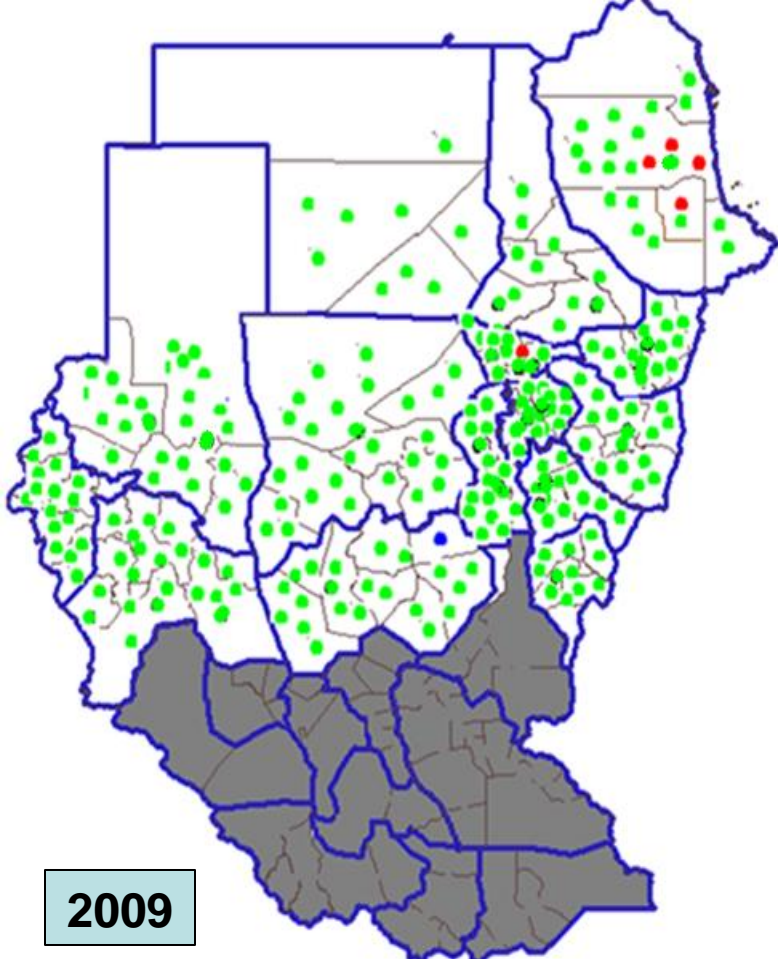
**Week 2**

**( ending on 14 January  
2011 )**

**AFP surveillance  
system North sudan**

## Map 2. Distribution of AFP cases by classification

N Sudan 2009-2010



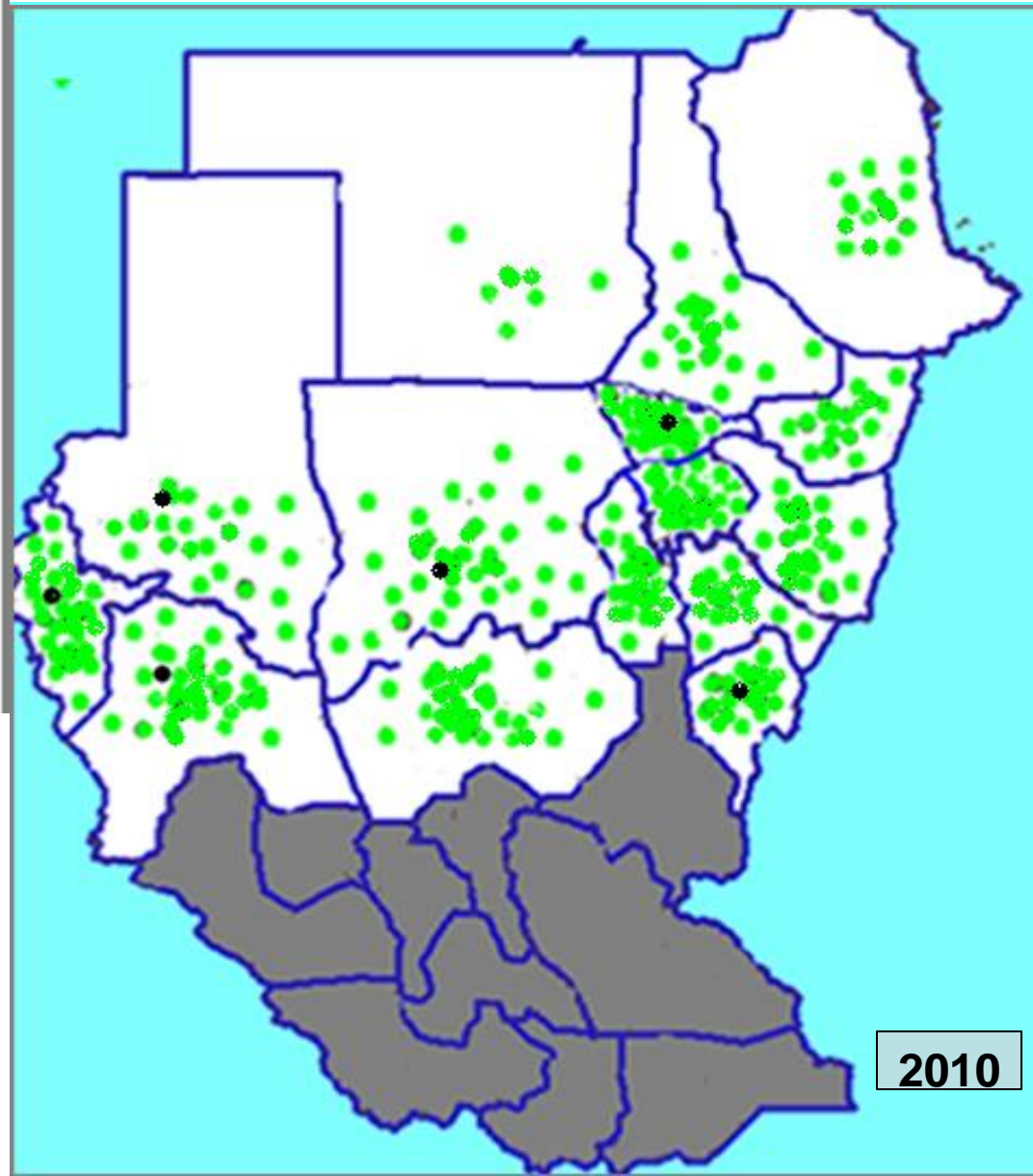
2009

● Polio case P1

● Compatible case

● Non-polio AFP

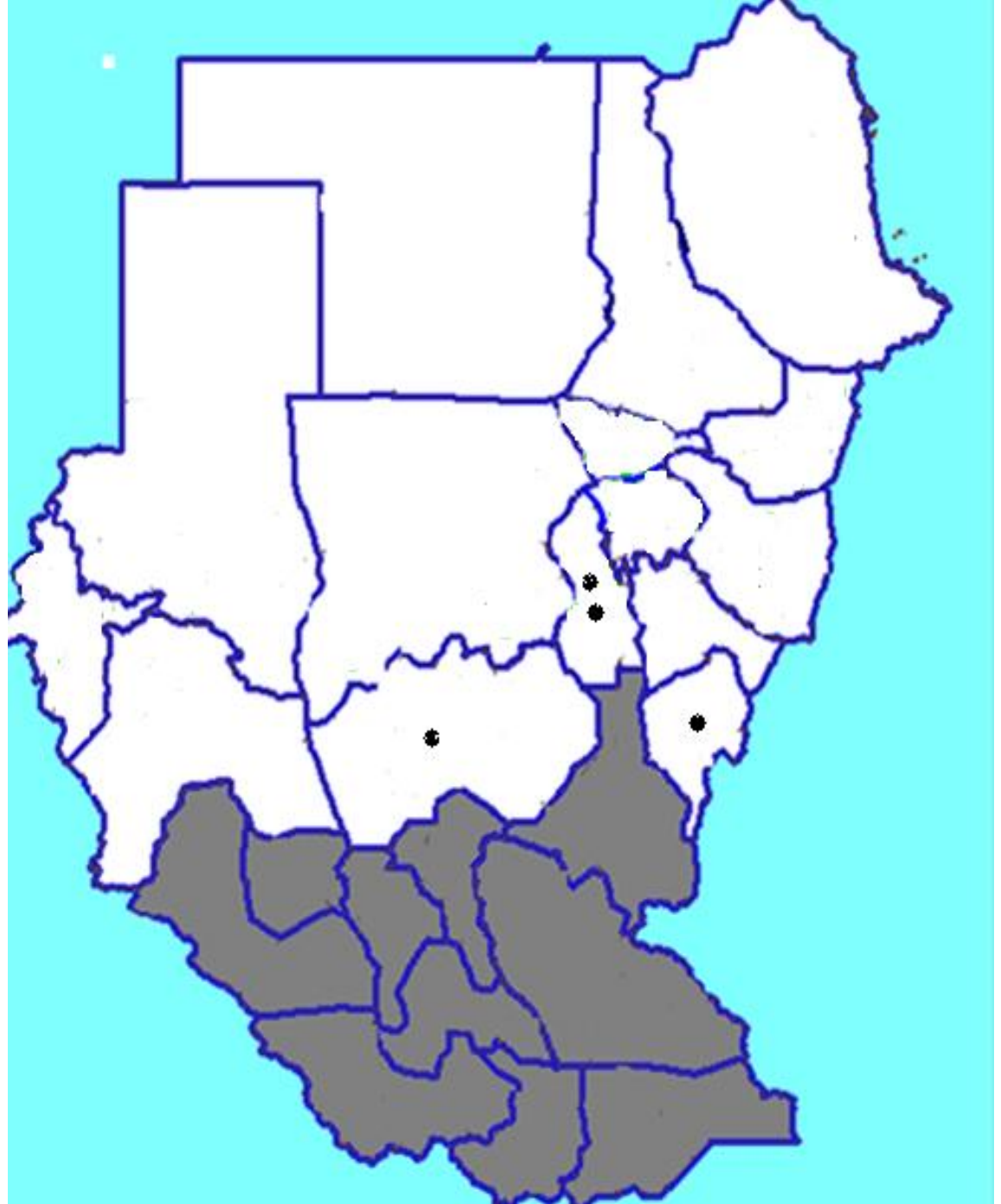
● Pending classification



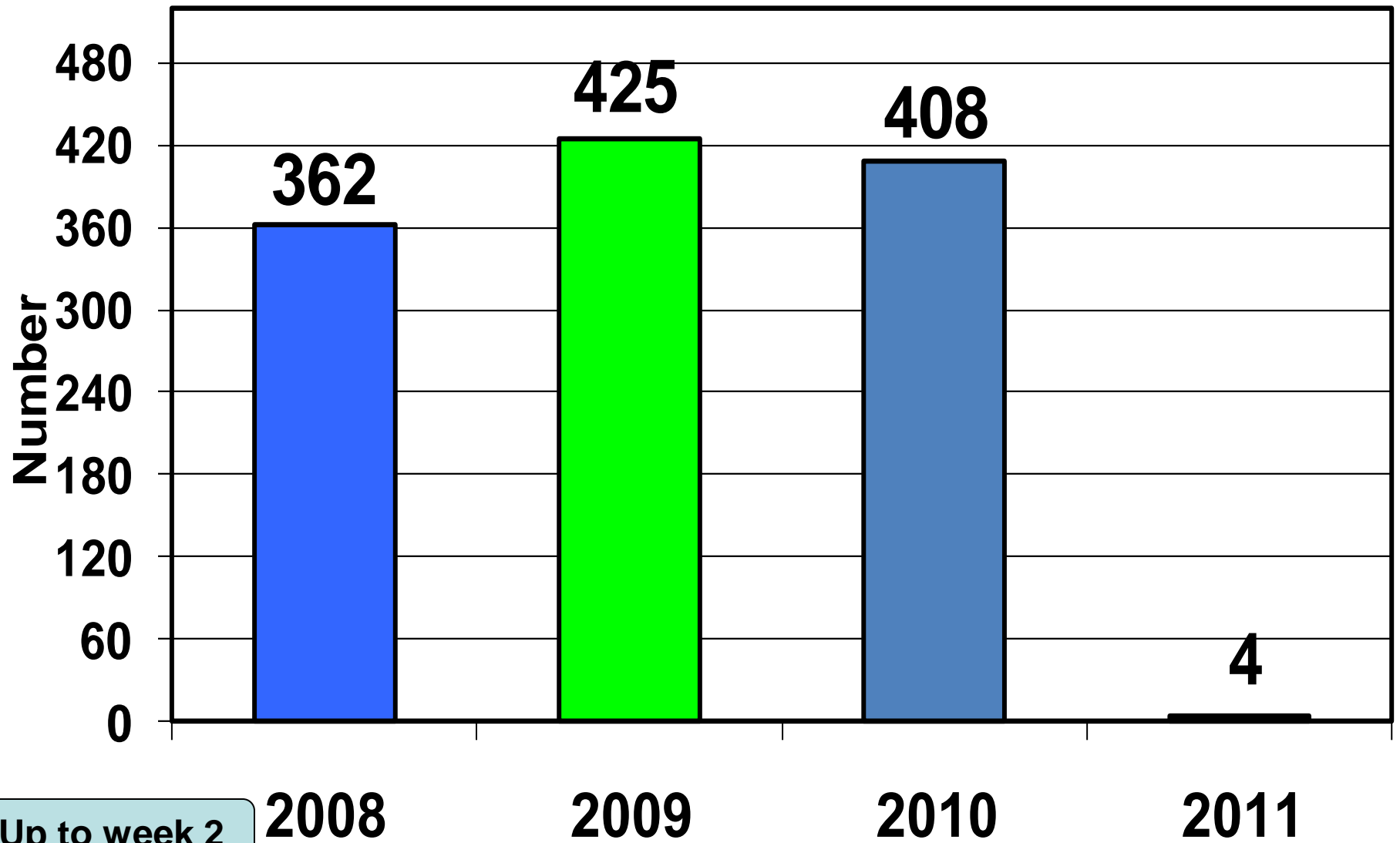
2010

**Map 2.  
Distribution  
of AFP cases  
pending  
classification**

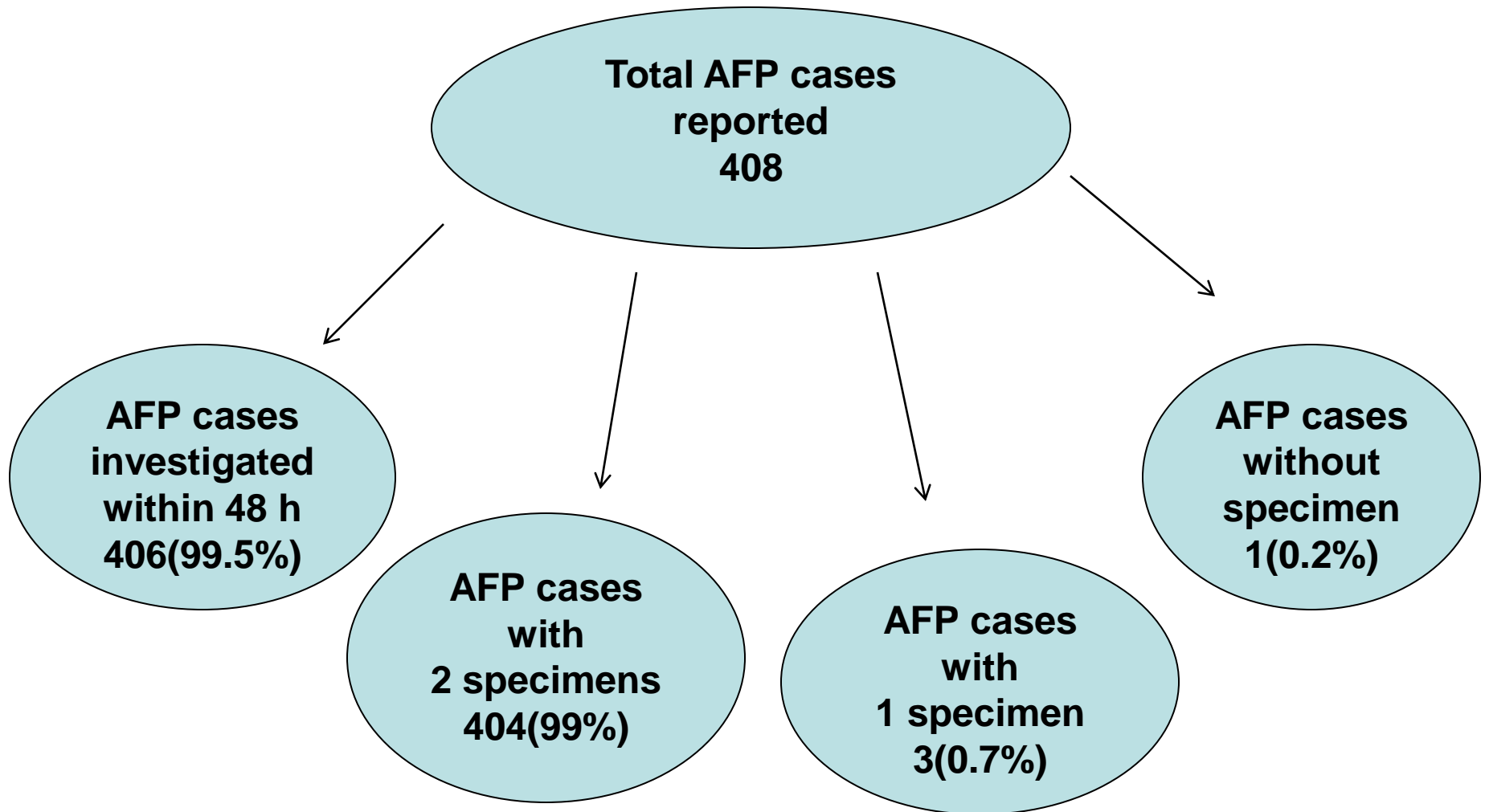
**N Sudan  
2011**



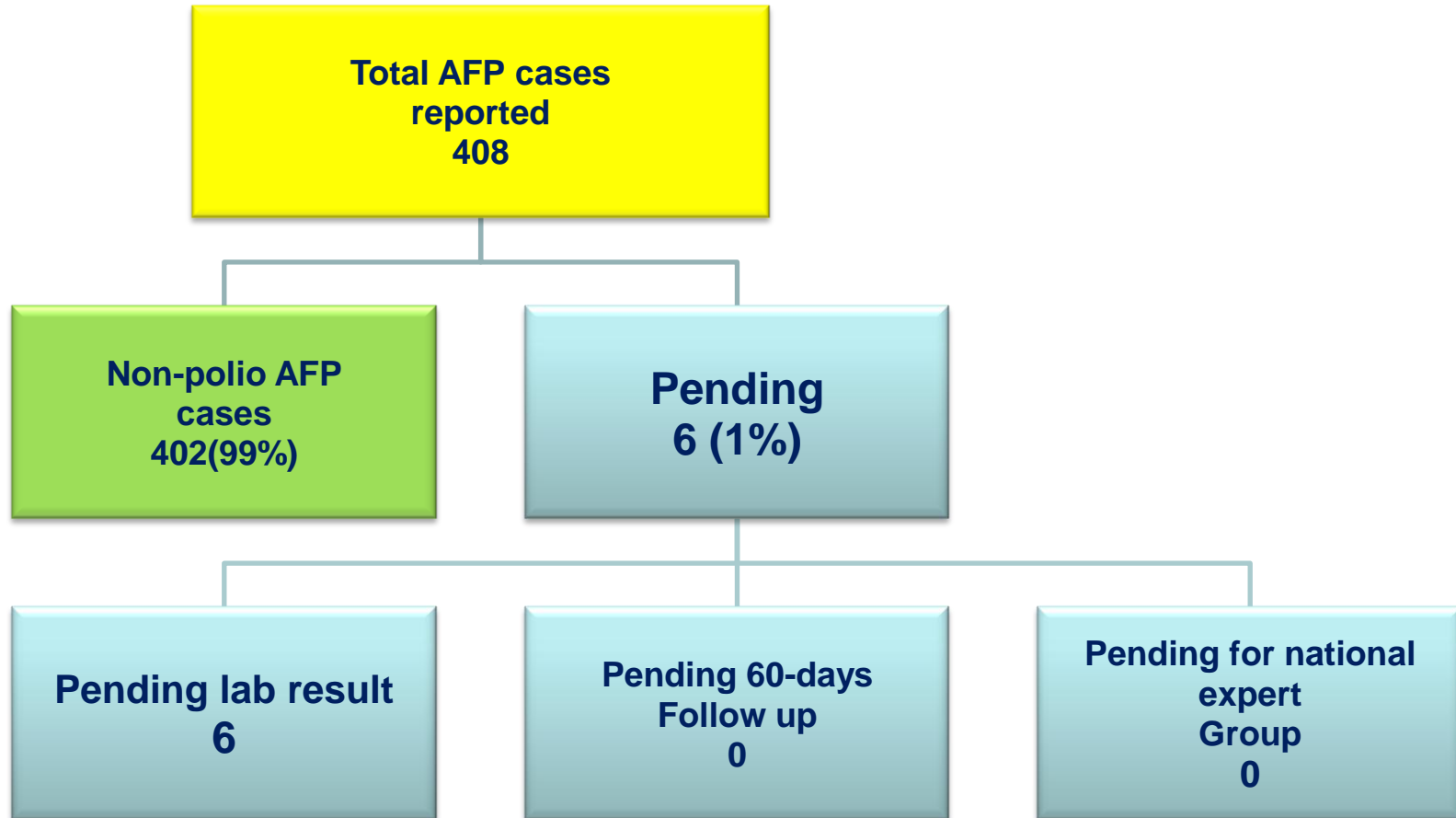
# Fig 1. Total AFP cases, North Sudan 2007 - 2011\*



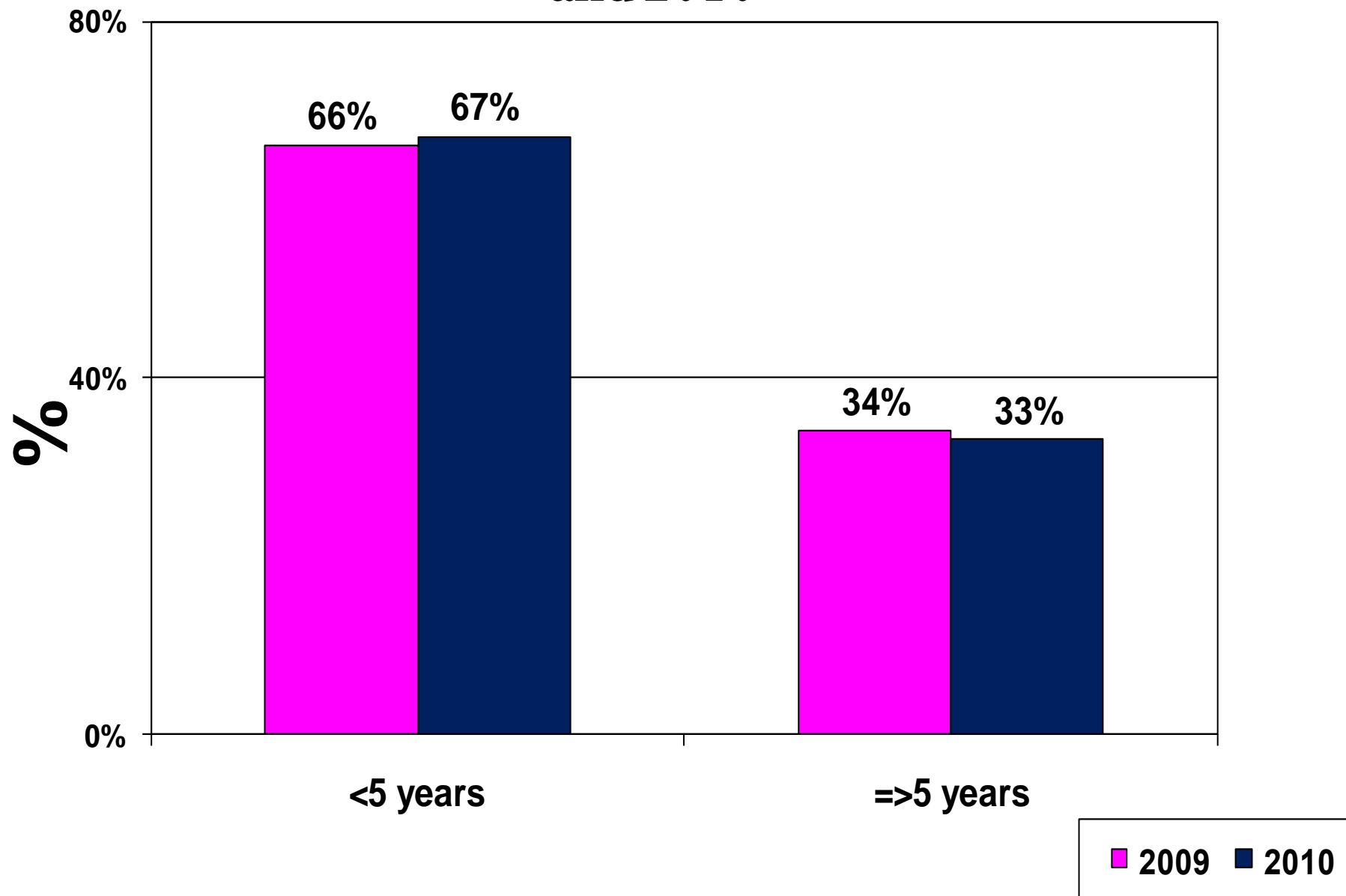
**Fig 2. Timeliness of responding to reported AFP cases, North Sudan, 2010**



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

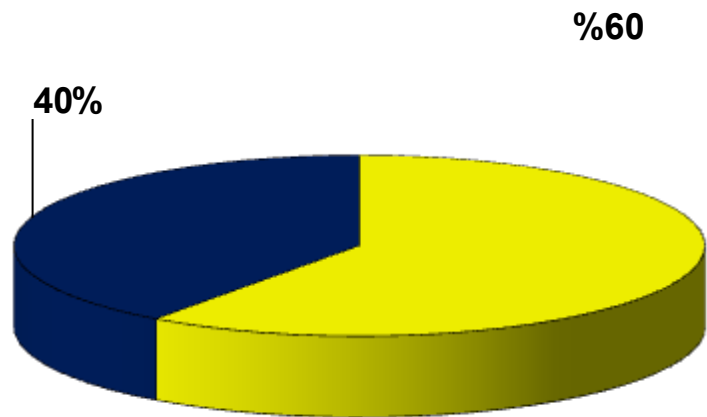


# Fig 3. North Sudan AFP cases by age group, 2009 and 2010

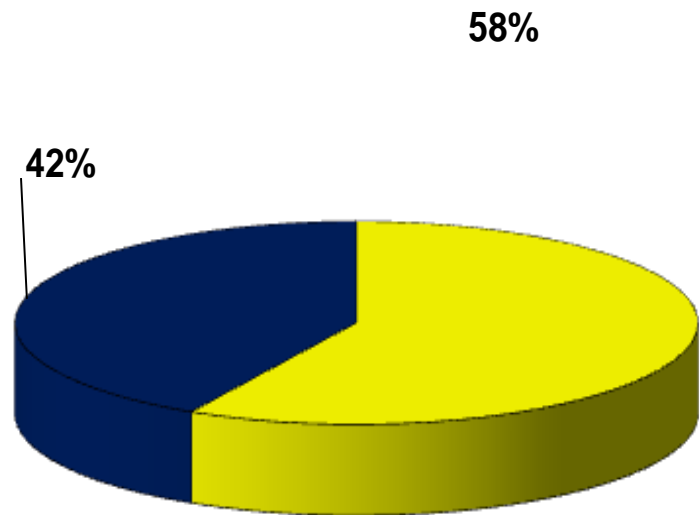


# Fig 4. North Sudan AFP cases by Sex, 2009- \*2010

2009



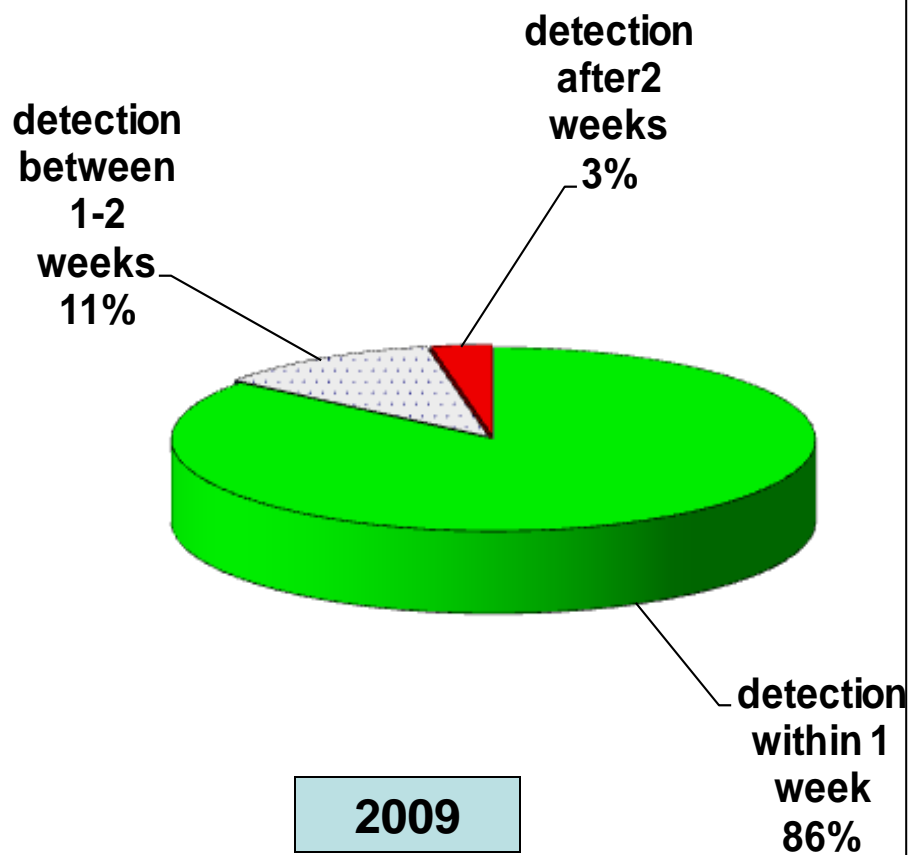
2010



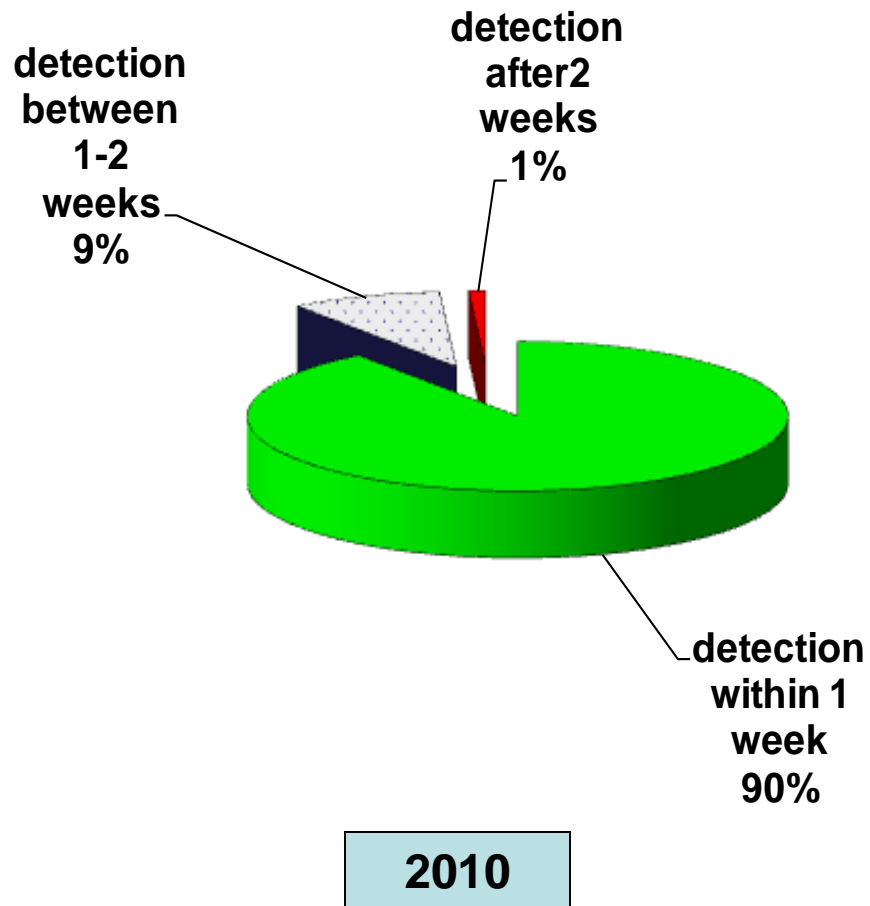
■ male ■ female



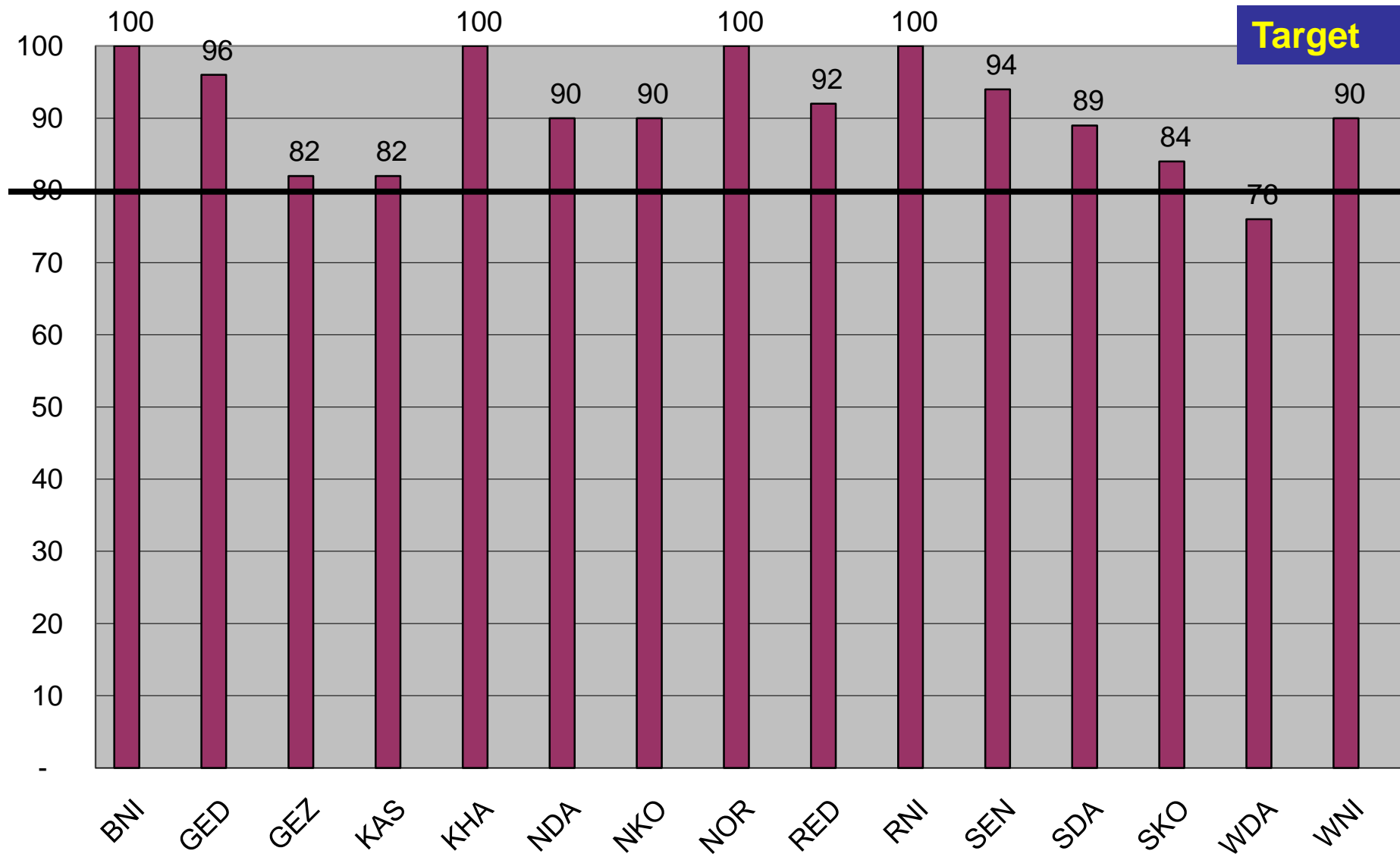
**Fig 5. Percent distribution of AFP cases by time of detection, North Sudan, 2009**



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



# Early detection {within one week} of AFP cases by states North sudan 2010



**Table 1. Major AFP surveillance performance indicators, Northern States, 2010 (up to wk 52)**

<b>State</b>	<b>U 15 yrs population</b>	<b>Reported AFP cases</b>	<b>Non-polio AFP cases</b>	<b>Pending classifica</b>	<b>Polio</b>	<b>Comp cases</b>	<b>% Adequate stools</b>	<b>Non-polio AFP rate</b>	<b>% NPEV</b>
<b>B. Nile</b>	<b>355,219</b>	<b>20</b>	<b>19</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>5.6</b>	<b>5%</b>
<b>Gedarif</b>	<b>833,767</b>	<b>22</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>95%</b>	<b>2.6</b>	<b>14%</b>
<b>Gezira</b>	<b>1,868,934</b>	<b>50</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>96%</b>	<b>2.7</b>	<b>20%</b>
<b>Kasala</b>	<b>815,721</b>	<b>22</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>95%</b>	<b>2.7</b>	<b>5</b>
<b>Khartoum</b>	<b>2,316,035</b>	<b>49</b>	<b>48</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>2.1</b>	<b>10%</b>
<b>N.Darf</b>	<b>836,608</b>	<b>29</b>	<b>28</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>3.5</b>	<b>18%</b>
<b>N.Kord</b>	<b>1,243,363</b>	<b>40</b>	<b>39</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>98%</b>	<b>3.2</b>	<b>15%</b>
<b>Northern</b>	<b>263,099</b>	<b>7</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>2.7</b>	<b>14%</b>

**Con-Table 1. Major AFP surveillance performance indicators, Northern States, 2010 (up to wk 52)**

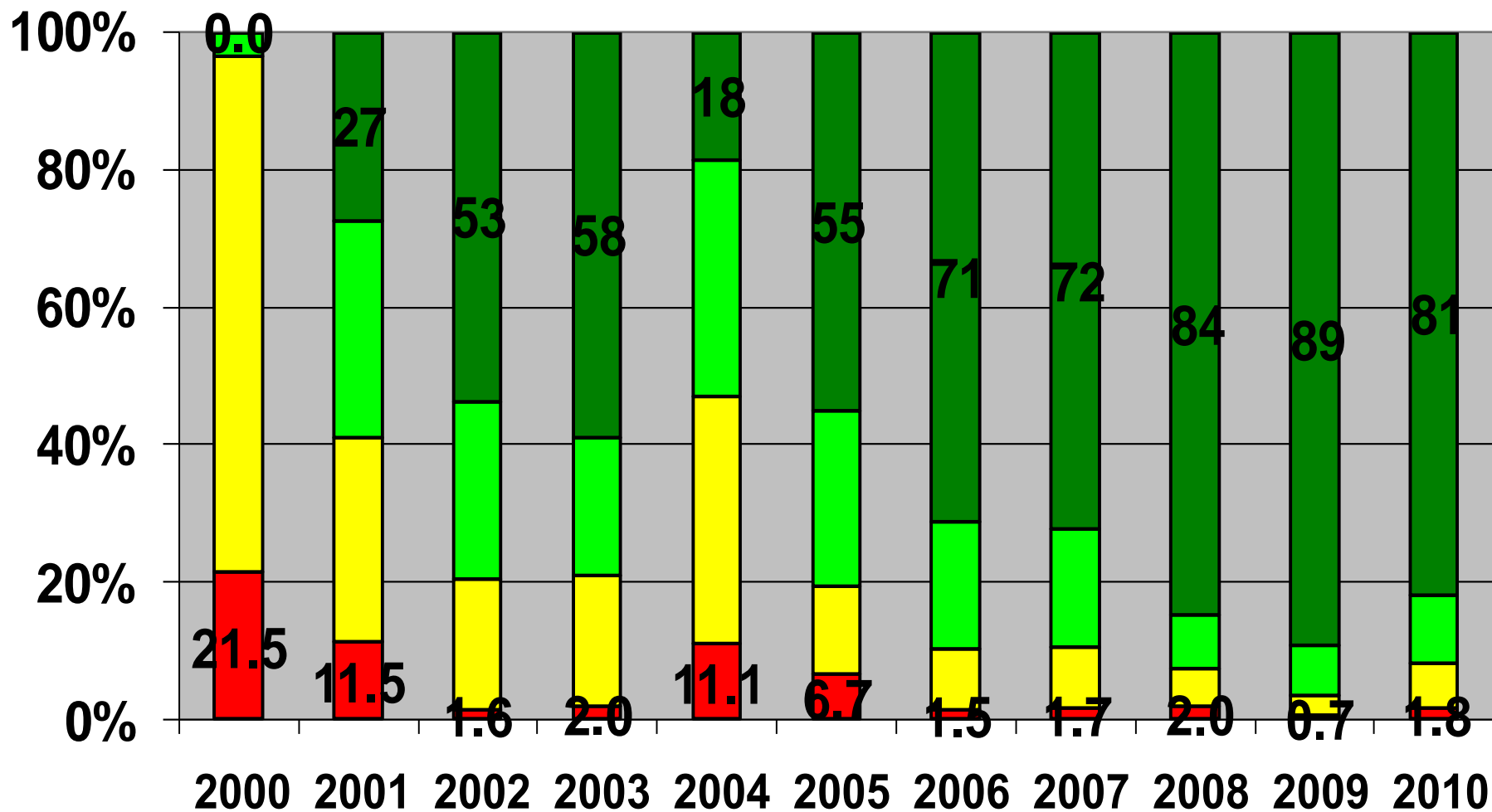
<b>State</b>	<b>U 15 yrs population</b>	<b>Report ed AFP cases</b>	<b>Non-polio AFP cases</b>	<b>Pending classific a</b>	<b>Polio</b>	<b>Comp cases</b>	<b>% Adequate stools</b>	<b>Non-polio AFP rate</b>	<b>% NPEV</b>
<b>Red Sea</b>	<b>329,031</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>92%</b>	<b>4.0</b>	<b>8%</b>
<b>River Nile</b>	<b>453,525</b>	<b>18</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>94%</b>	<b>4.0</b>	<b>6%</b>
<b>Sennar</b>	<b>699,734</b>	<b>16</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88%</b>	<b>2.3</b>	<b>25%</b>
<b>S. Darfur</b>	<b>1,689,498</b>	<b>35</b>	<b>34</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>97%</b>	<b>2.1</b>	<b>24%</b>
<b>S. Kord</b>	<b>947,711</b>	<b>25</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>2.6</b>	<b>28%</b>
<b>W.Darfur</b>	<b>927,169</b>	<b>41</b>	<b>40</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>98%</b>	<b>4.4</b>	<b>15%</b>
<b>W. Nile</b>	<b>814,450</b>	<b>21</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100%</b>	<b>2.6</b>	<b>14%</b>
<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>15.5%</b>



# Con-Table 1. Major AFP surveillance performance indicators, Northern States, 2011 (up to wk 2)

State	U 15 yrs population	Reported AFP cases	Non-polio AFP cases	Pending classification	Polio	Comp cases	% Adequate stools	Ann.n on-polio AFP rate	% NPEV
Red Sea	330,018								
River Nile	461,734								
Sennar	717,437								
S. Darfur	1,747,110								
S. Kord	960,789	1					%100	2.7	
W.Darfur	949,143								
W. Nile	834,567	2					%100	6.2	
<b>Total</b>	<b>14,777,621</b>	<b>4</b>					<b>%100</b>	<b>0.7</b>	

# Fig 7. Percent distribution of AFP cases < 60 months by number of OPV doses, North Sudan 2000-010



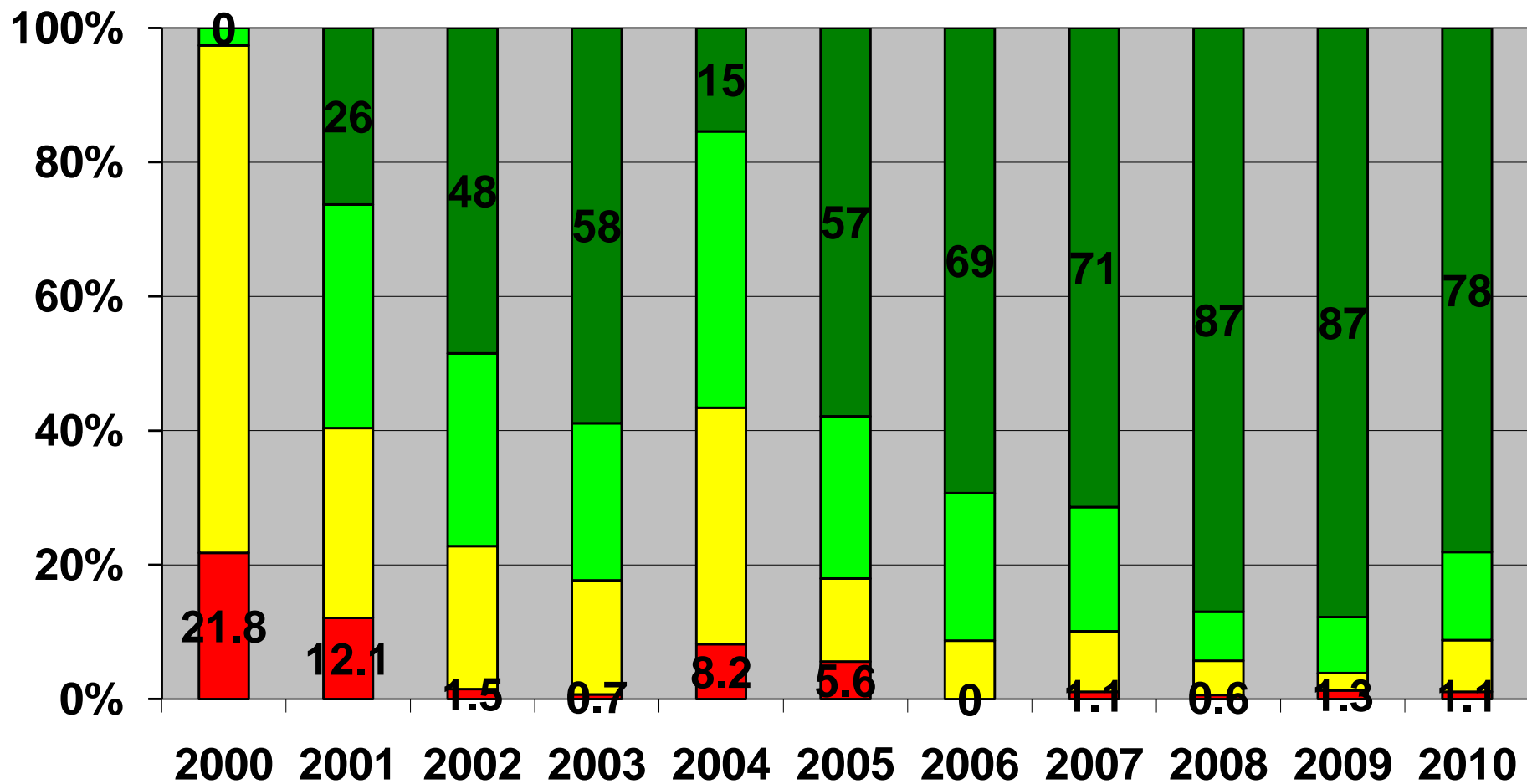
0 OPV doses

1-3 OPV doses

4-6 OPV doses

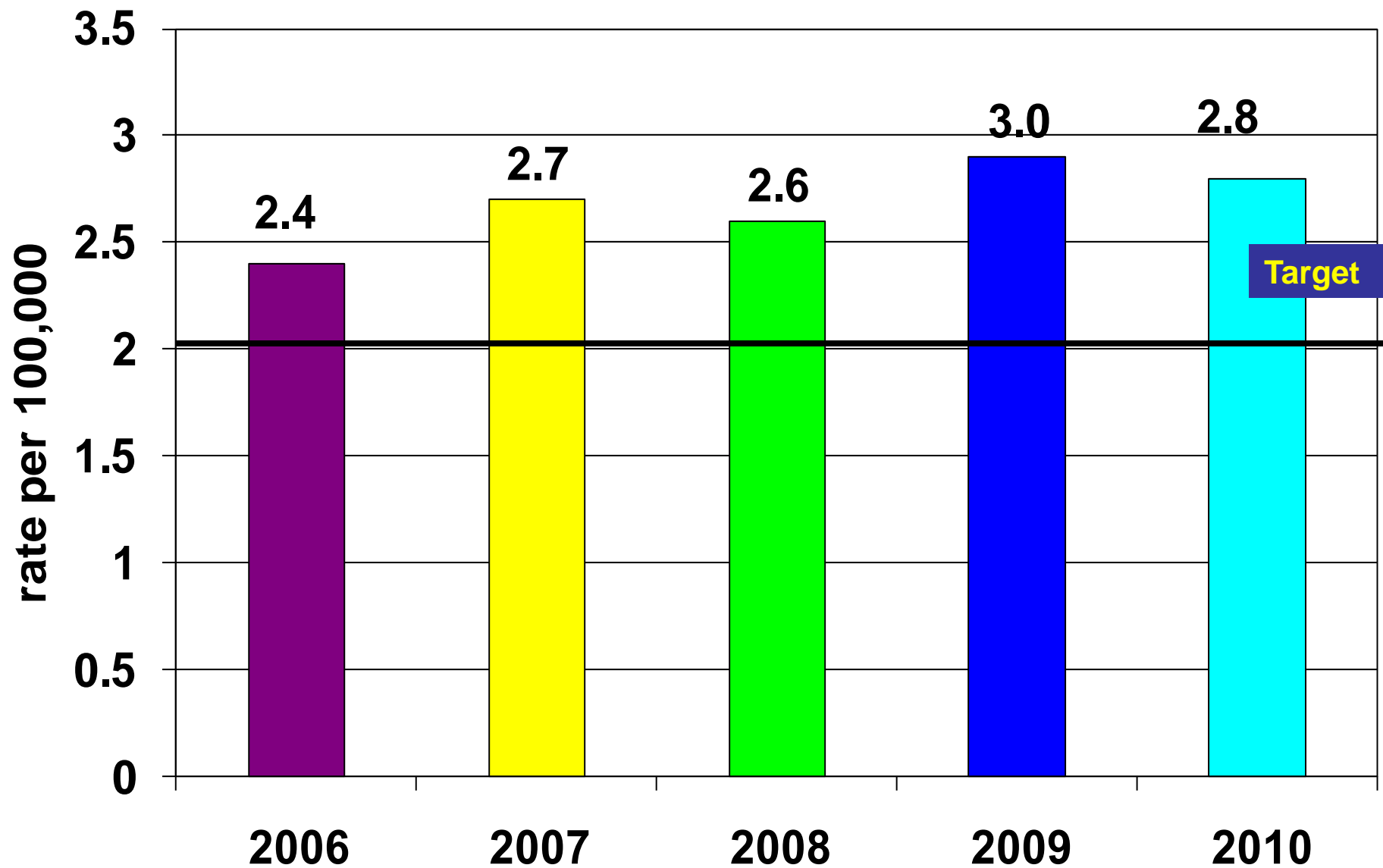
7+ OPV doses

**Fig 8. No. & percent distribution of AFP cases 6-36 months by number of OPV doses, North Sudan 2000-010**



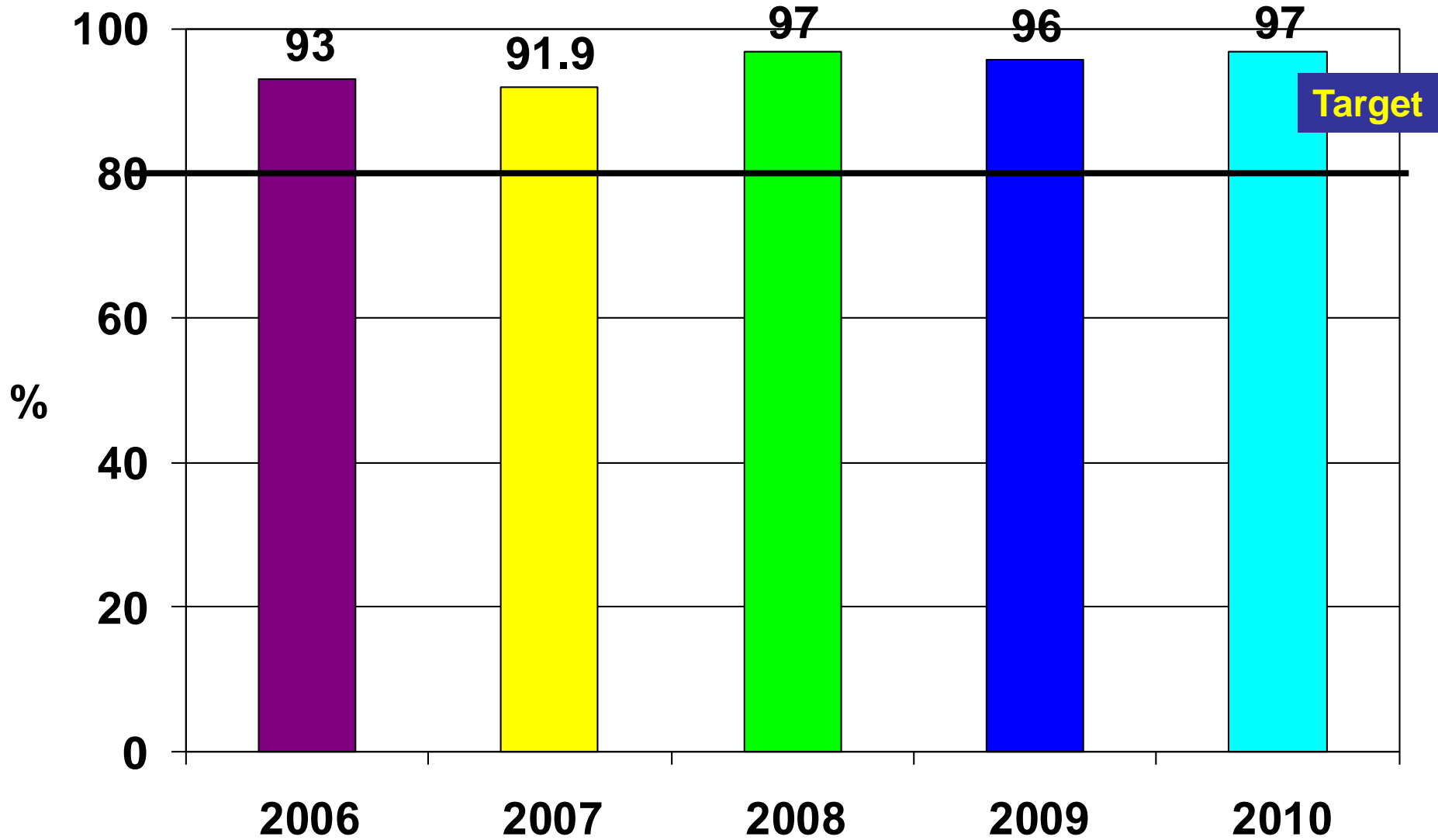


**Fig 8. Non-Polio AFP rate per 100,000 children under 15 years of age, North Sudan, 2006 – 2010**

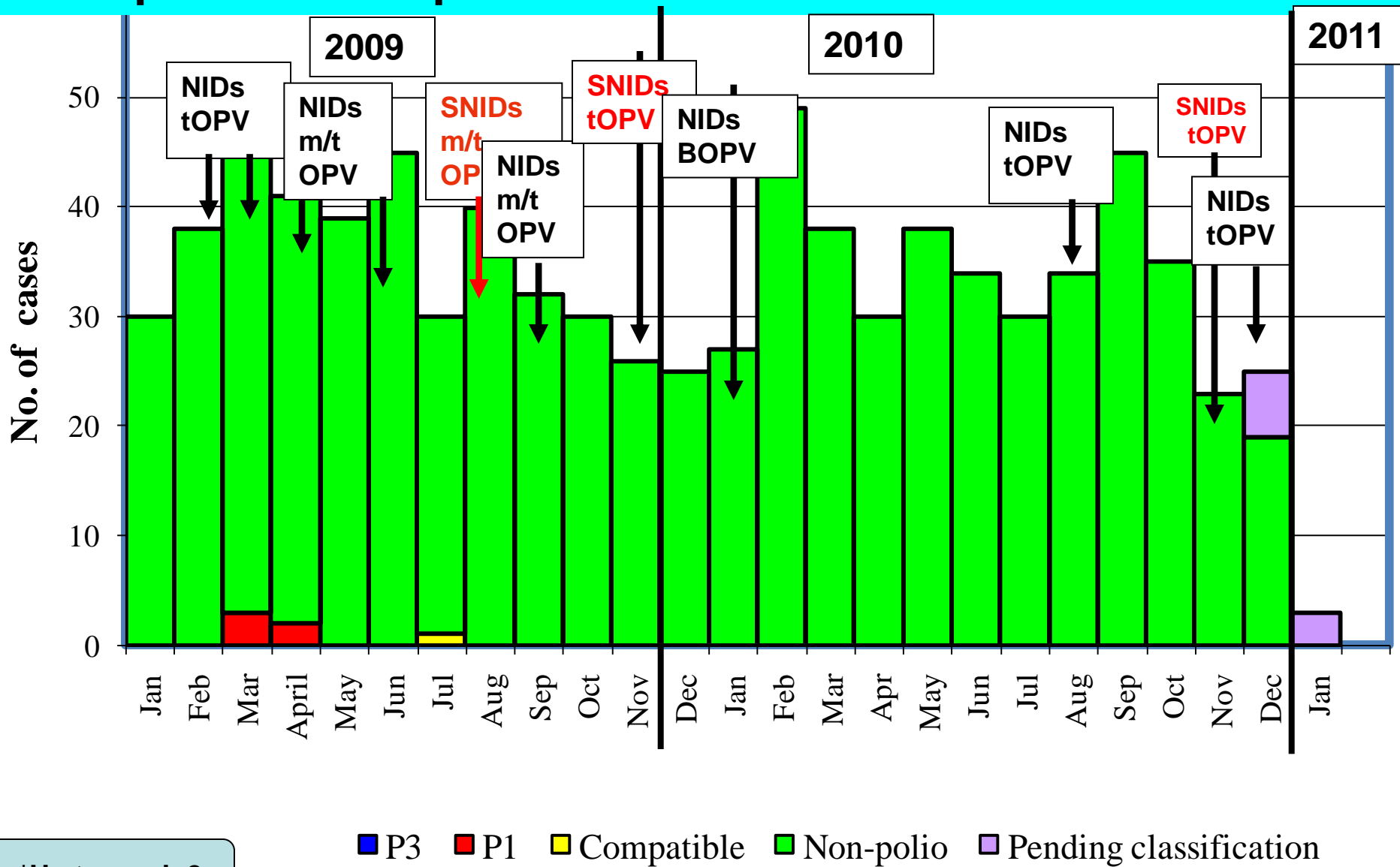


# Fig 9. Adequate stool collection rate

## North Sudan, 2006 – 2010\*

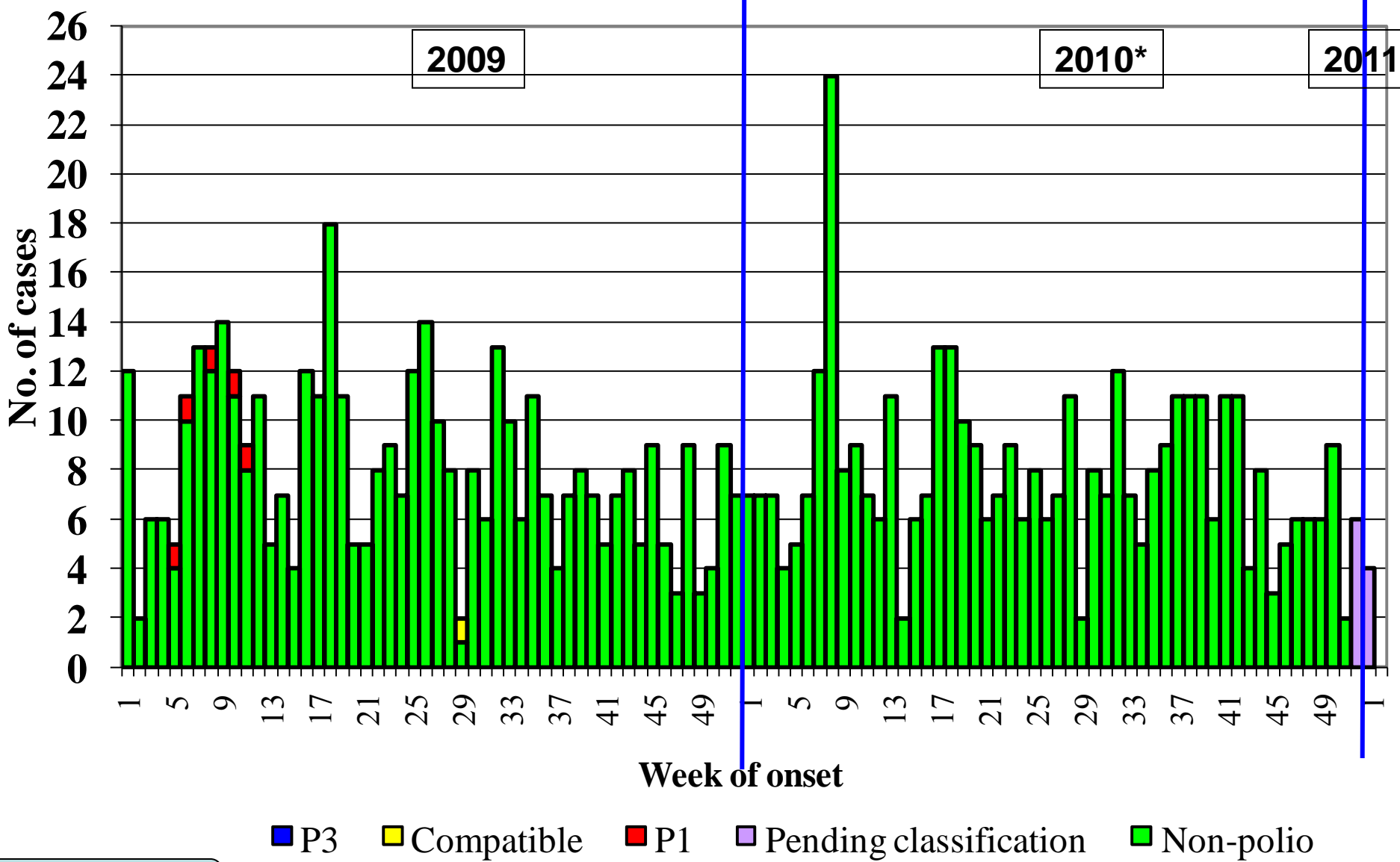


# Fig 11. Distribution of polio and non-polio AFP Cases by classification, month of onset & SIA response to the poliovirus importation in North SUDAN 2008-2011\*



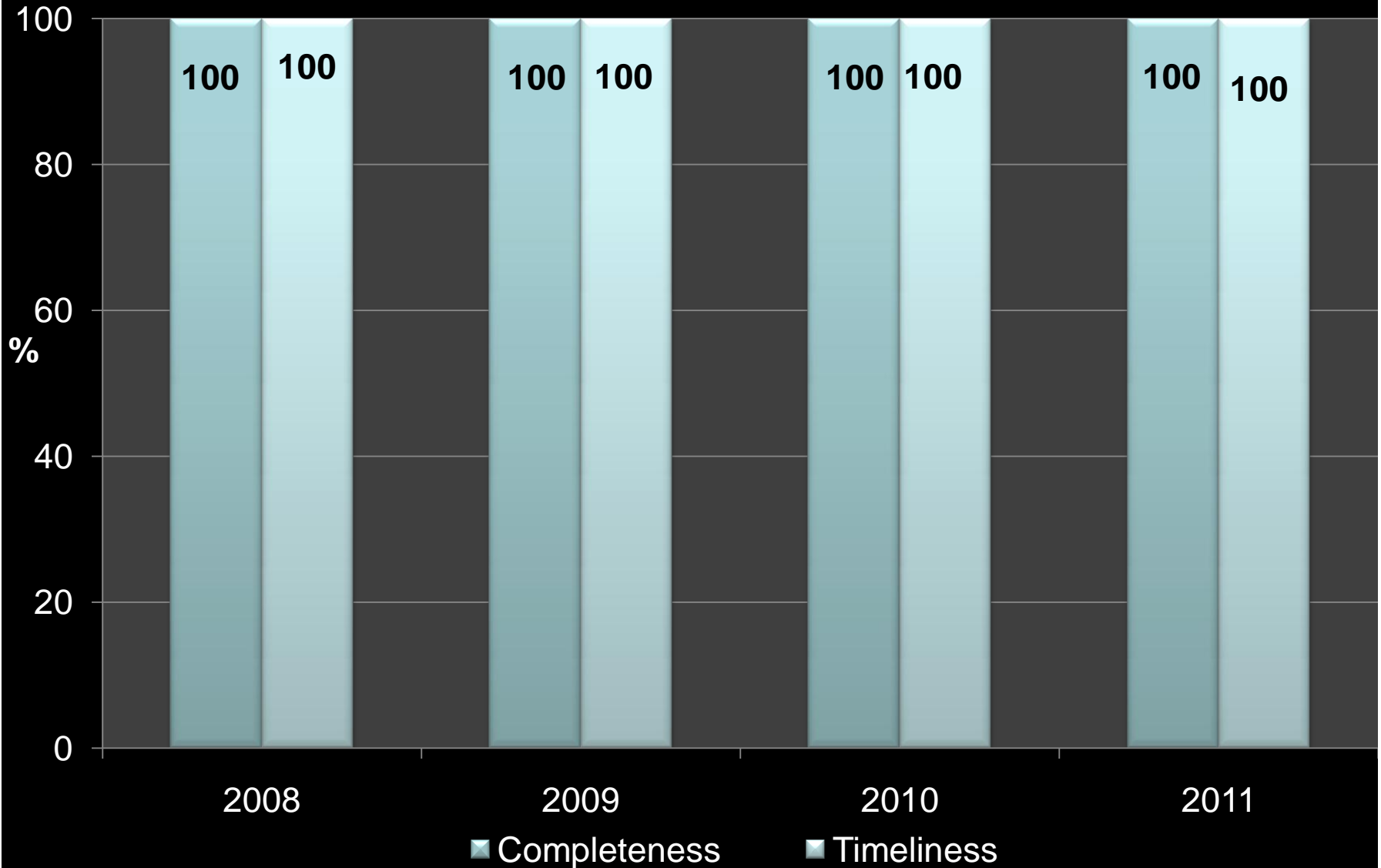
\*Up to week 2

# Fig 12. Distribution of AFP cases by classification and week of onset, North Sudan 2007 – 2011\*



\*Up to week 2

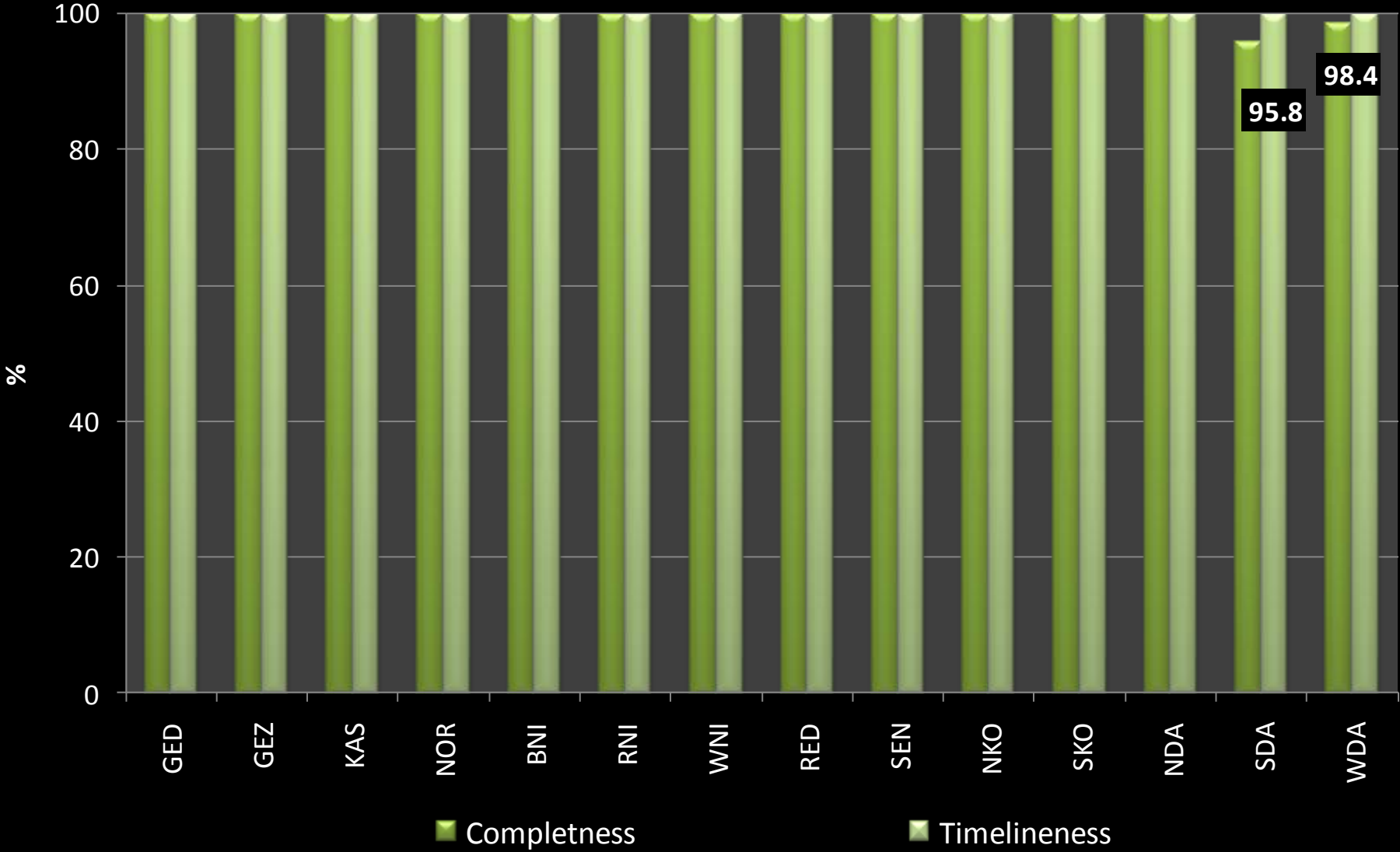
**Fig 13. Zero Reports (Comp. & Time.) According To Reporting To C.U for Northern States, 2008-2011**



**Fig 14. (Comp. & Time) Of Zero Reports According To Reporting Sites For Northern States 2011 (week2)**



**Fig 15. Zero Report (Comp.& Tim.) According To Reporting Sites For Northern States 2011 (up to week 2)**



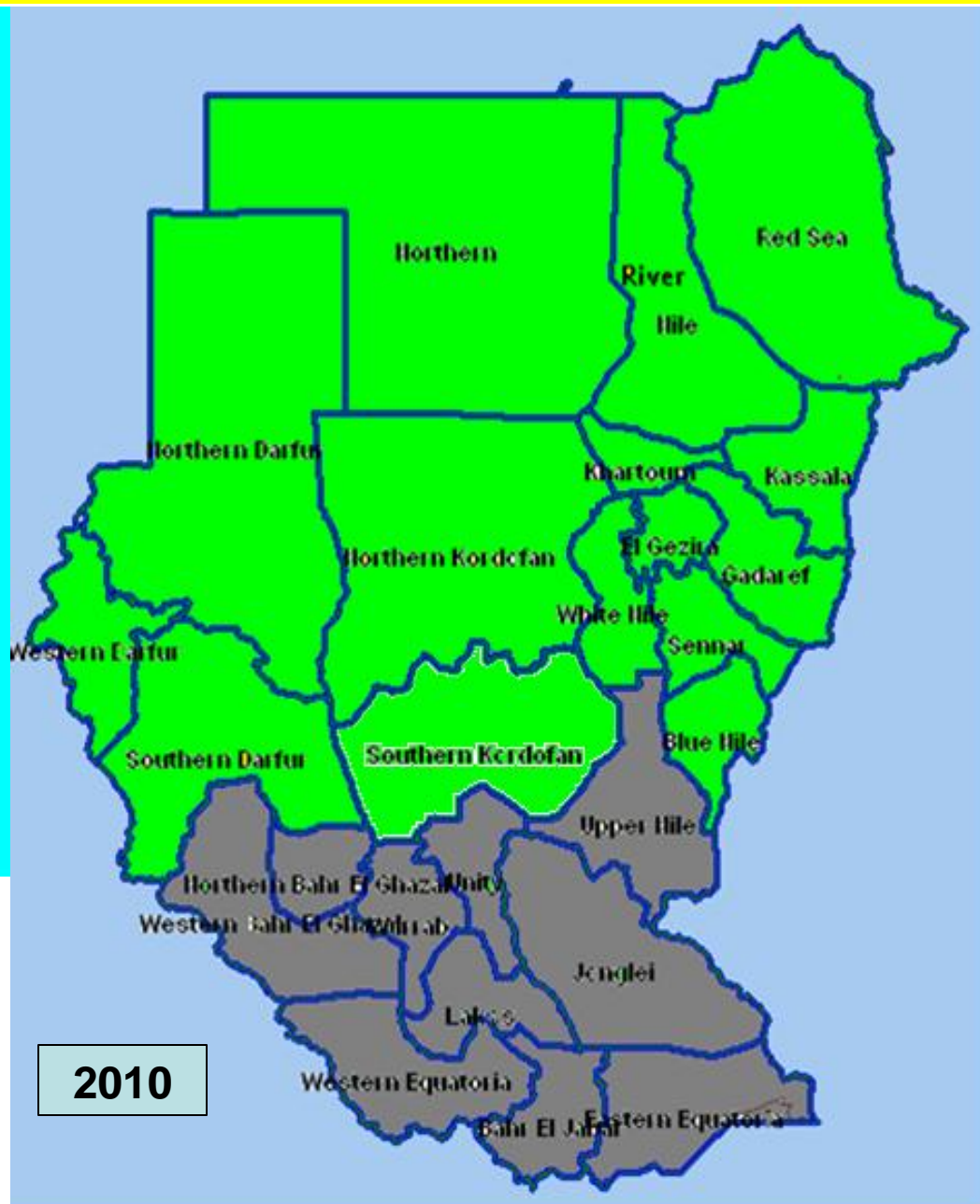
# Map 3. Annualized non-polio AFP rate per 100,000 by state, 2009- 2010



2 or more per 100,000

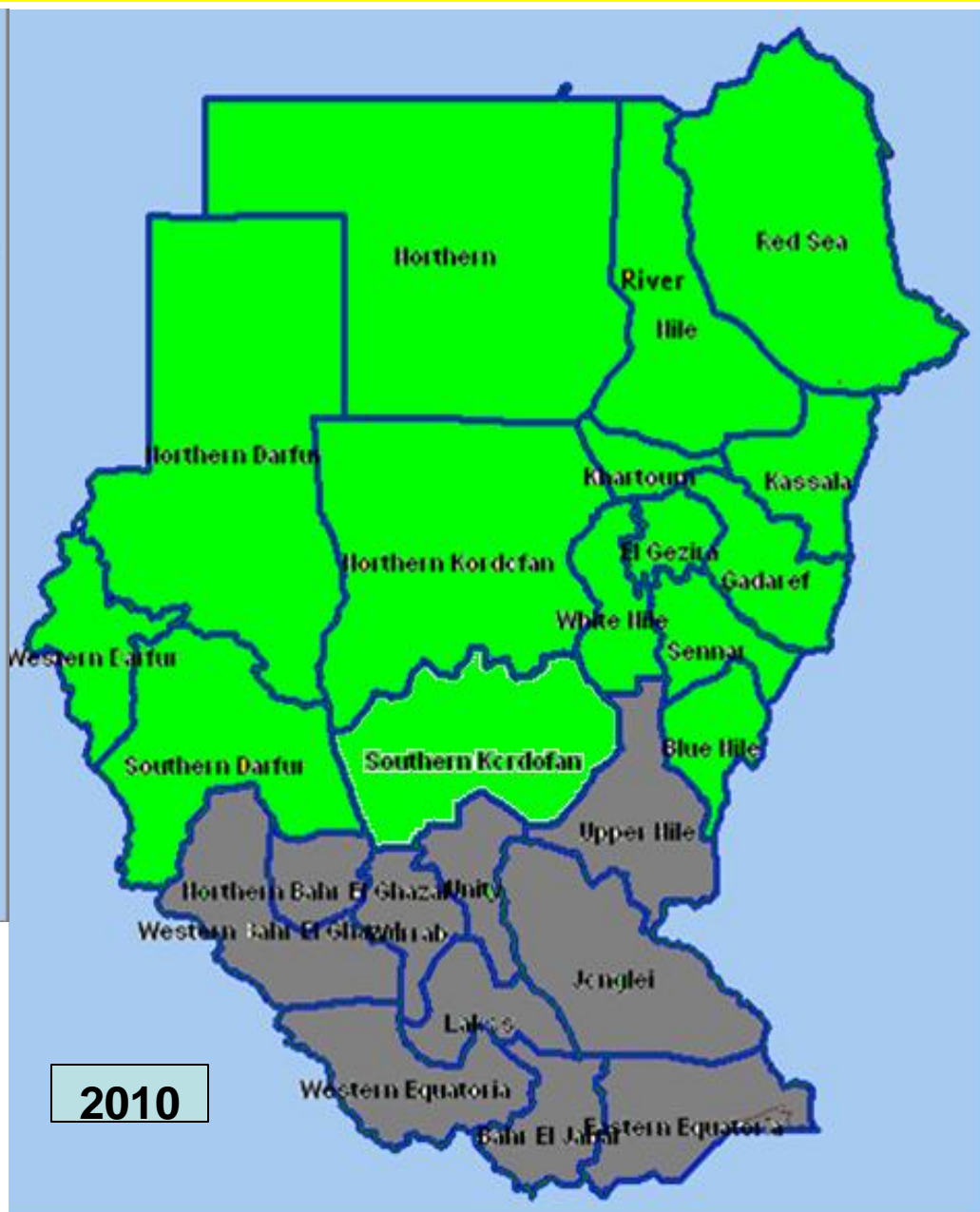
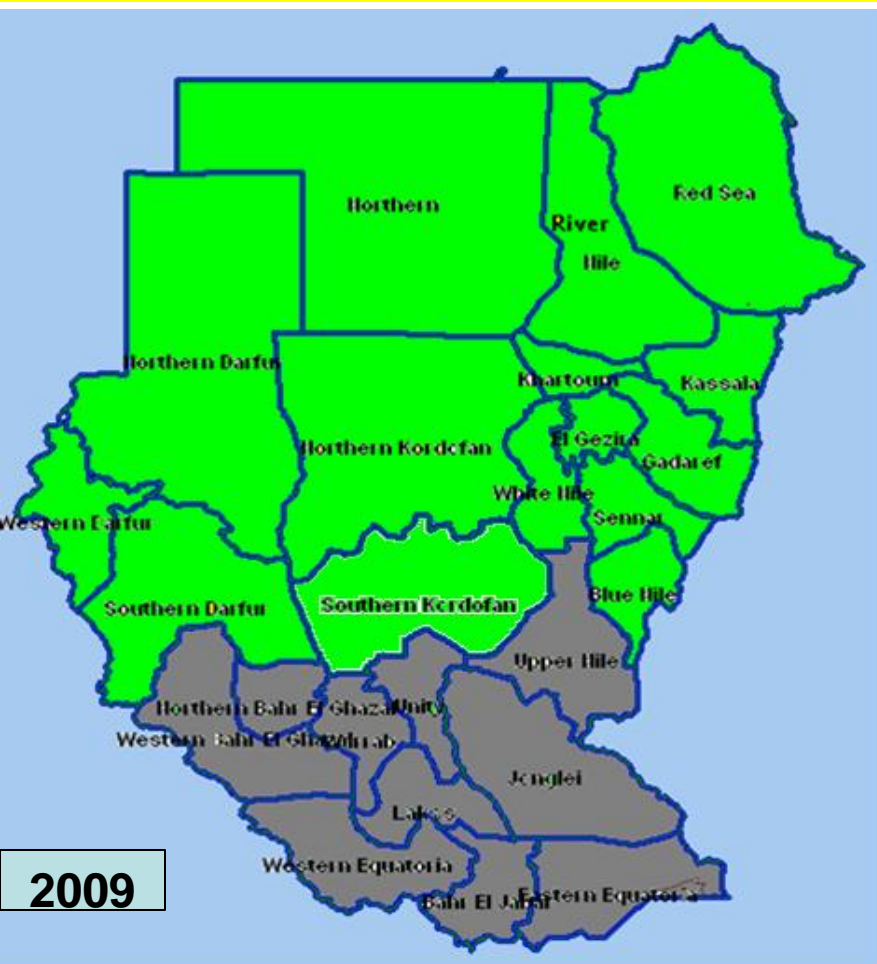


1-1.9 per 100,000





# Map 4. Percent distribution of AFP cases having adequate stool samples by state, 2009- 2010



- 80% - 100%
- 60% - 79%
- No cases

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

Indicator	2008	2009	2010*
AFP cases with samples tested in NPL	361	420	407
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%	15.5%
SL viruses No. & (%) from AFP cases	7 (2%)	7 (1.7%)	8 (1.9%)
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	255
Contacts with non-polio enterovirus	8.1%	8.2%	(13.6)%
Sabin like viruses No. & (%) from contacts	9(2.3%)	4(0.9)	0
NSL like viruses from contacts	0	3	0
Number of Healthy children received in the lab	0	0	5

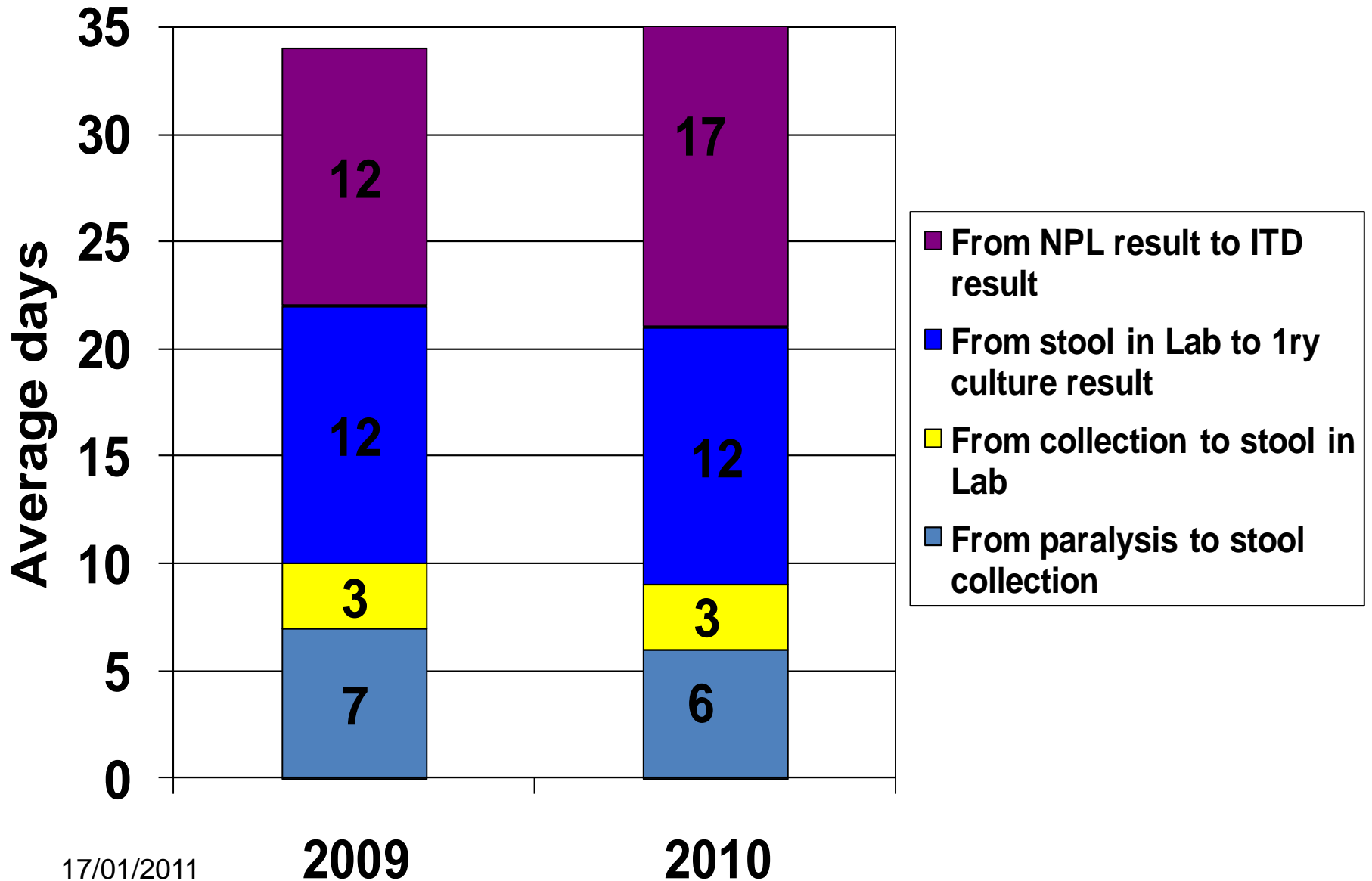
**Table 5. Polio lab performance  
North Sudan, 2009 and 2010 {up to week 52}**

<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>371</b>	<b>53</b>	<b>13%</b>	<b>91%</b>	<b>81%</b>	<b>99%</b>
<b>Up to W52 2010</b>	<b>407</b>	<b>6</b>	<b>0</b>	<b>339</b>	<b>62</b>	<b>15.5 %</b>	<b>93.2%</b>	<b>84%</b>	<b>99%</b>

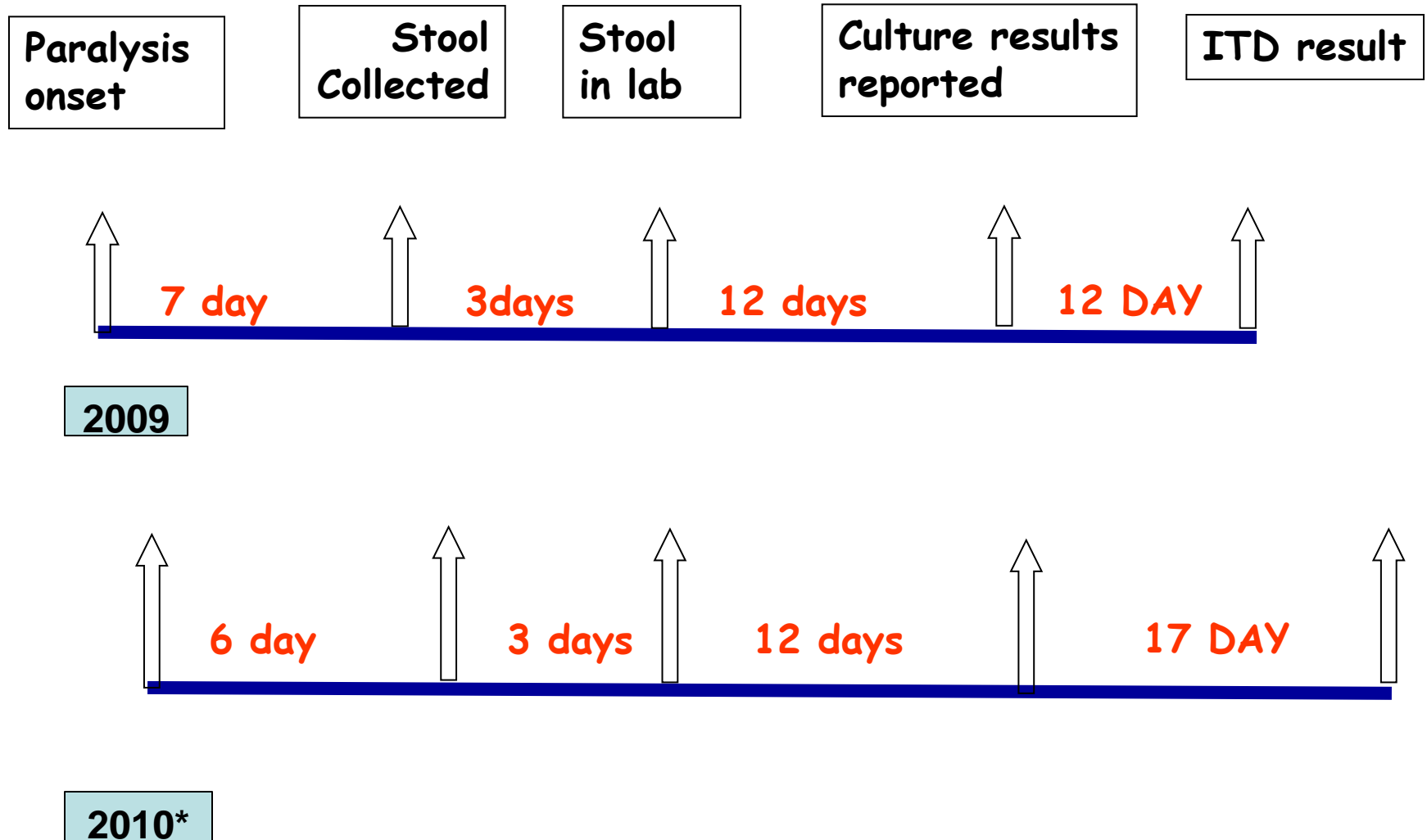
**Table 2 Polio lab performance  
North Sudan up to week one 2010 and 2011**

<b>Week of onset</b>	<b>Total Cases</b>	<b>Cases under process</b>	<b>L20B POS</b>	<b>NPEV negative</b>	<b>NPEV positive</b>	<b>% NPEV</b>	<b>Result reported within 14days</b>	<b>Arrival within 3 days of being collected</b>
<b>Up to Week one 2011</b>	1	0	0	0	0	0%	0%	
<b>Up to week one 2010</b>	1	0	0	0	0	0%	0%	

**Fig. 14: AFP Specimens' timeliness, NPL2009-2010**



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



Thanks