

Table 1.0. West Nile Meningitis Summary Figures as of 5th March 2007

DISTRICT	NEW CASES (26 <sup>th</sup> Feb- 4 <sup>th</sup> Mar 07)	CUMULATIVE CASES	NEW DEATH ( 26 <sup>th</sup> Feb-4 <sup>th</sup> Mar 07)	TOTAL DEATH	CFR [%]
*ARUA/ MARACHA- TEREGO	60	1982	2	55	2.8
KOBOKO	12	454	1	22	4.8
YUMBE	44	391	1	16	4.1
ADJUMANI	46	280	4	12	4.3
MOYO	21	150	0	6	4.0
NEBBI	15	40	3	7	17.5
<b>TOTAL</b>	<b>198</b>	<b>3,297</b>	<b>11</b>	<b>118</b>	<b>3.6</b>

### Highlights

- The meningitis epidemic in West Nile sub-region has continued to decline in all districts over the last week (26<sup>th</sup>- February -4<sup>th</sup> March 2007), save for Nebbi and Moyo districts.
- The districts' of Arua/Maracha-Terego, Adjumani ,Koboko and Yumbe continued to report significant reduction in number of new cases during this period(26<sup>th</sup>- February -4<sup>th</sup> March 2007).
- In Nebbi district there has been a resurgence of the epidemic specifically in Akworo sub county that shares a common border with the Democratic Republic of Congo. However no case has been confirmed in the district in spite of provision of all the necessary logistics(Rapid test kit, Spinal needles and trans-isolate media) to carry out confirmation
- In Moyo district the situation has remained more less the same during this period relative to the previous week(19<sup>th</sup> - February 2007)
- Vaccination has been completed in targeted sub counties in all the districts' of west Nile except for Nebbi district as shown below.

District	No. of S/Cs Vaccinated	Number Vaccinated	% Coverage
Arua/Maracha-Terego	20	496,204	108.6
Koboko	5	128,467	115.3
Yumbe	5	93,359	61.0
Moyo	4	38,692	39.4
Adjumani	3	77,697	77.4

- “The low coverage in the districts' of Moyo, Yumbe and Adjumani is primarily attributed to the inflated denominators(target populations) and to some extent repatriation of refugees who constituted a significant proportion of the denominator”(discussions with DHOs and DHTs of these districts’).
- Vaccines and other related logistics have arrived in the districts' of Yumbe, Moyo and Adjumani today(5<sup>th</sup> March 2007) and the second phase of vaccination should continue tomorrow; Yumbe(2 sub counties);Moyo(4 sub counties); Adjumani(2 sub counties)
- Field visits by a joint team of MSF, MOH, UNICEF, WHO and a representative from ICG was conducted from 27<sup>th</sup> -28<sup>th</sup> February 2007 in the districts of Arua/Maracha-Terego, Koboko, Yumbe and Moyo. During

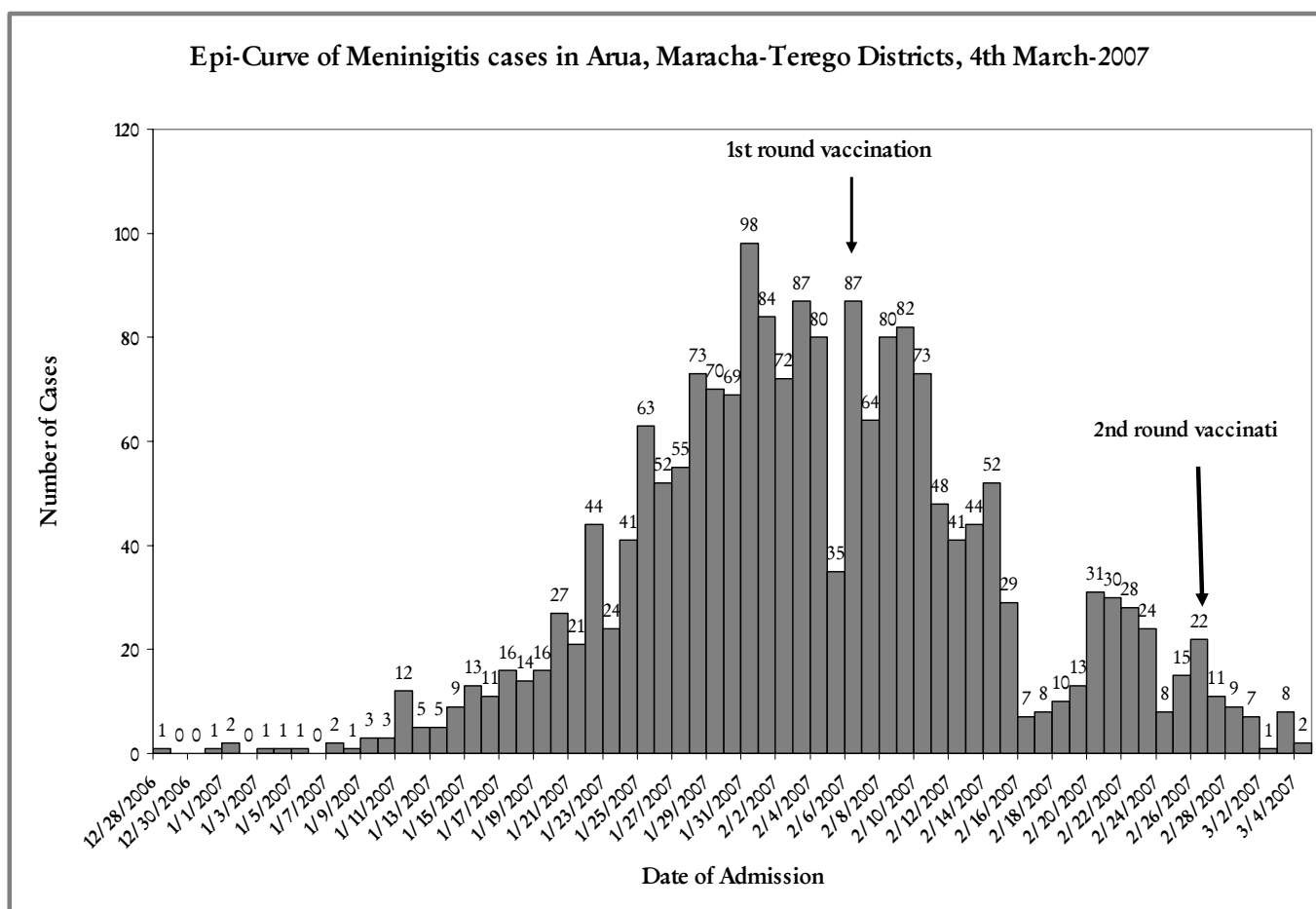
these visits discussions were held with DHT,DHO,Local leaders and field staff on challenges in accessing vaccine and experiences in conducting mass vaccination campaigns using the two approaches(mass campaign and the phased step wise approaches advocated and promoted by MOH and MSF respectively).

## 1.2.0 DISTRICT DESCRIPTIVE EPIDEMIOLOGY

### 1.2.1 ARUA/ MARACHA-TEREGO DISTRICT

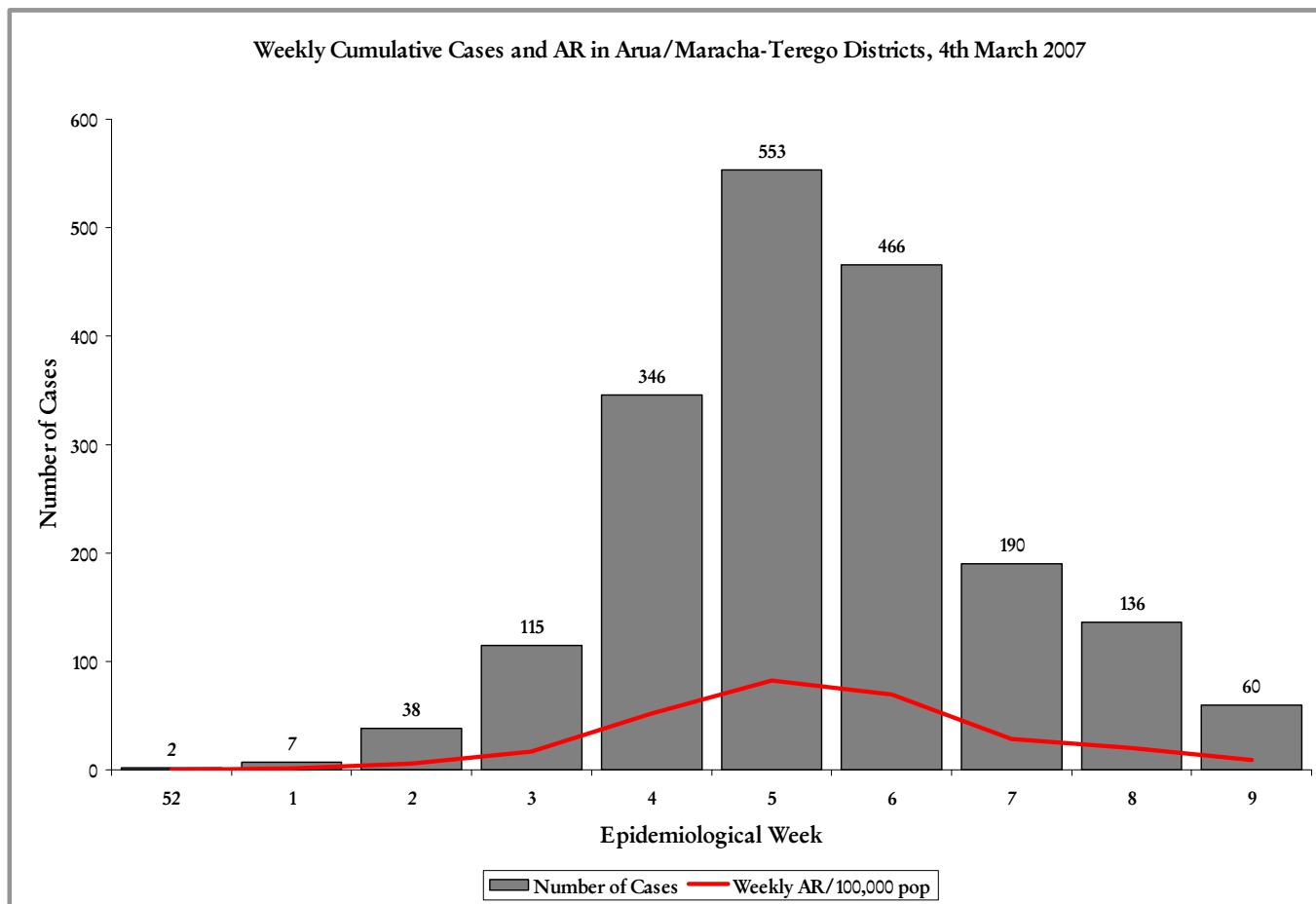
The meningitis epidemic has continued to significantly reduce in Arua/ Maracha-Terego districts. The cumulative number of new cases registered in the last 1 week [25<sup>th</sup> February -4<sup>th</sup> March 2007] was 60 cases with 2 deaths. A cumulative number of 1,982 cases with 55 deaths have been registered, giving a CFR of 2.8%. 33 of the new cases were vaccinated. The epi-curve in figure 1.0 demonstrates a significant decline in the number of cases since mass meningitis vaccination campaign was initiated on 3 February.

Figure 1.0.



The reduction in the number of cases is equally demonstrated in the weekly cumulative and AR figure 1.1 below.

Figure 1.1



The weekly AR of the sub-counties affected is shown in the table 1.1.

Table 1.1

Sub-county	Total Population	Weekly Attack Rate/ 100,000 population										Cumulative AR/ 100,000 population
		52	1	2	3	4	5	6	7	8	9	
Omugo	35,074	-	6	17	145	311	425	271	74	26	9	1,283
Yivu	22,077	-	-	5	59	145	403	231	118	50	5	1,015
Aiivu	33,064	-	-	21	30	227	233	169	76	48	0	805
Oleba	25,646	-	-	-	31	121	105	226	43	31	0	558
Katrini	31,101	-	-	-	3	45	103	113	106	12	24	360
Odupi	49,727	4	6	42	36	58	99	54	28	23	32	424
Nyadri	24,113	-	-	4	-	54	95	100	54	12	12	245
Beleafe	16,298	-	12	-	-	37	117	55	-	0	0	157
Kijomoro	31,292	-	-	-	3	6	74	99	35	50	0	357

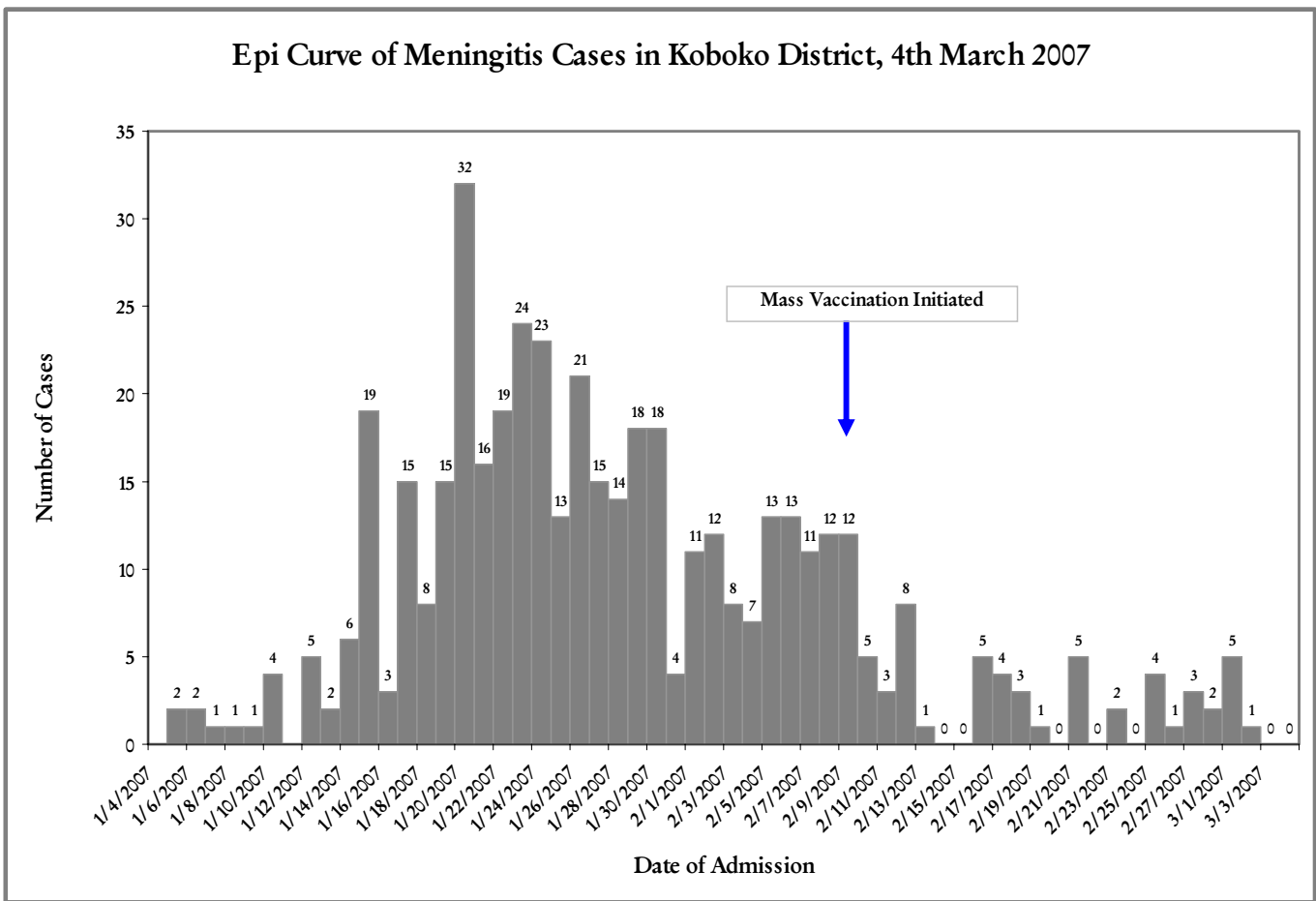
Tara	17,584	-	-	-	17	28	80	51	40	11	0	227
Oluffe	19,128	-	-	-	5	31	47	63	21	16	5	188
Uriama	21,600	-	-	-	9	37	32	79	-	38	3	259
Rhino Camp	17,728	-	-	-	-	23	23	6	51	3	0	84
Rigbo	32,251	-	-	6	22	22	19	9	3	0	0	70
Arua Hill [Municipality]	17,162	-	-	-	-	6	29	35	-	18	15	95
Oli River [Municipality]	33,848	-	-	-	-	3	21	32	6	0	6	107
Oluvu	27,576	-	-	-	-	7	11	11	7	10	5	41
Manibe	26,177	-	-	-	-	-	4	19	8	15	18	69
Pajulu	38,992	-	-	-	-	3	10	10	3	61	50	141
Dadamu	28,734	-	-	-	-	-	7	10	3	6	0	19
Aroi	21,365	-	-	-	-	-	9	5	-	21	3	45
Oluko	31,549	-	-	-	-	-	3	3	6	33	14	61
Adumi	45,878	-	-	-	-	-	4	7	-	0	0	5
Ajia	21,789	-	-	-	-	-	-	5	-	4	0	15
<b>Total</b>	<b>669,753</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>17</b>	<b>52</b>	<b>83</b>	<b>70</b>	<b>28</b>	<b>20</b>	<b>9</b>	<b>286</b>

The attack rates in all the sub counties in the district are generally declining-an indicator of a receding epidemic.

### 1.2.2. KOBOKO DISTRICT

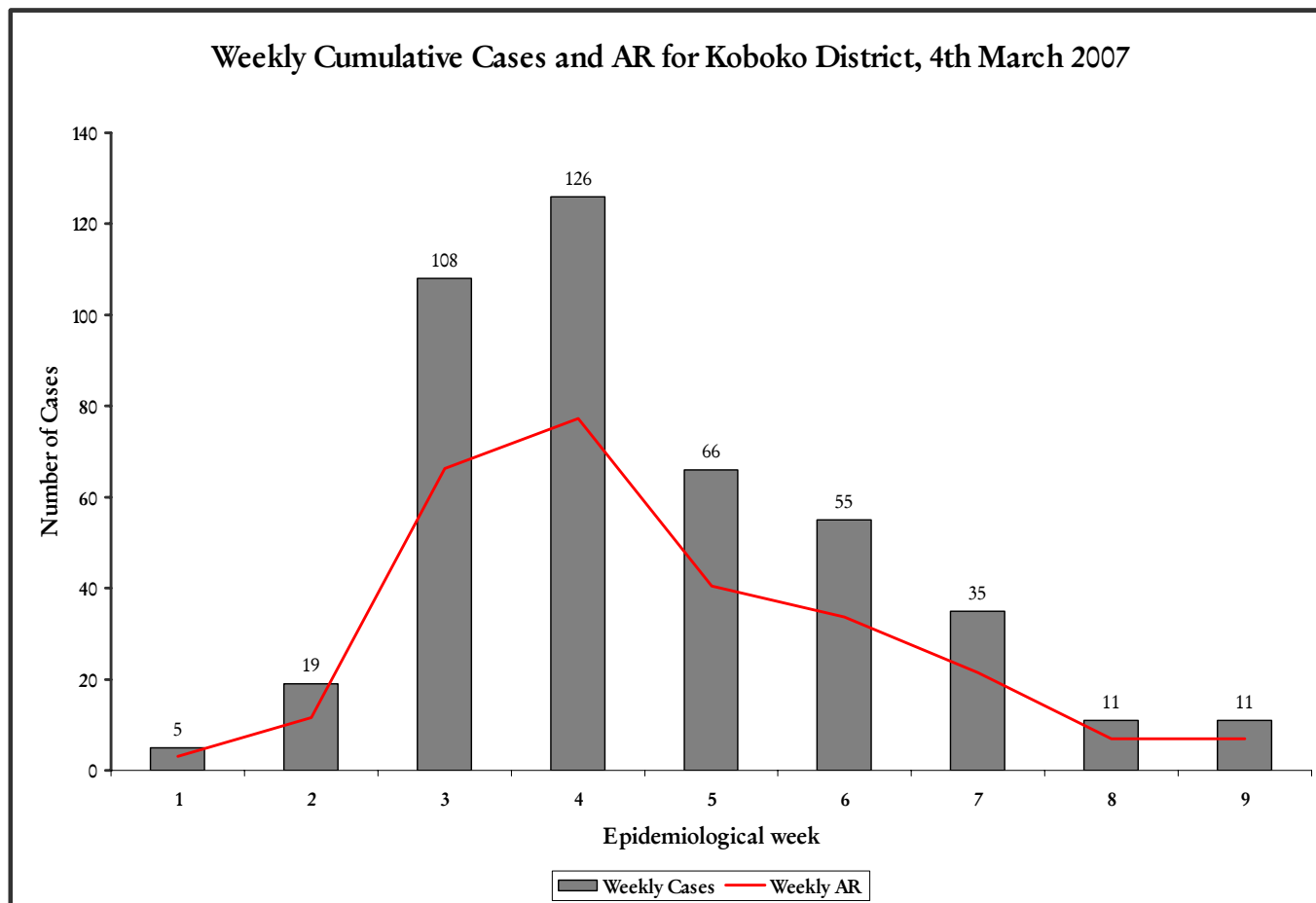
The meningitis epidemic in Koboko district continued to decline in the last week (26<sup>th</sup> February-4<sup>th</sup> March 2007) as indicated in the epi-curve 1.2. 12 new cases with 1 new death have been reported during this period, of which 1 case was from Sudan. A cumulative number of 454 cases with 22 deaths [CFR 4.8%] have been registered to date.

Figure 1.2



The weekly cumulative cases and AR are shown in the figure 1.3.

Figure 1.3



### Weekly AR and Cumulative by Sub-county in Koboko District

Table 1.2

Sub-county	Total Population	Weekly AR/ 100,000 Population									Cumulative AR/ 100,000 pop
		1	2	3	4	5	6	7	8	9	
Midia	35,094	3	26	131	142	68	66	66	17	3	521
Koboko Town Council	36,698	5	8	114	101	38	60	30	8	16	381
Lobule	44,655	4	16	31	49	38	4	2	2	4	152
Kuluba	23,034	-	-	22	61	35	9	-	4	4	135

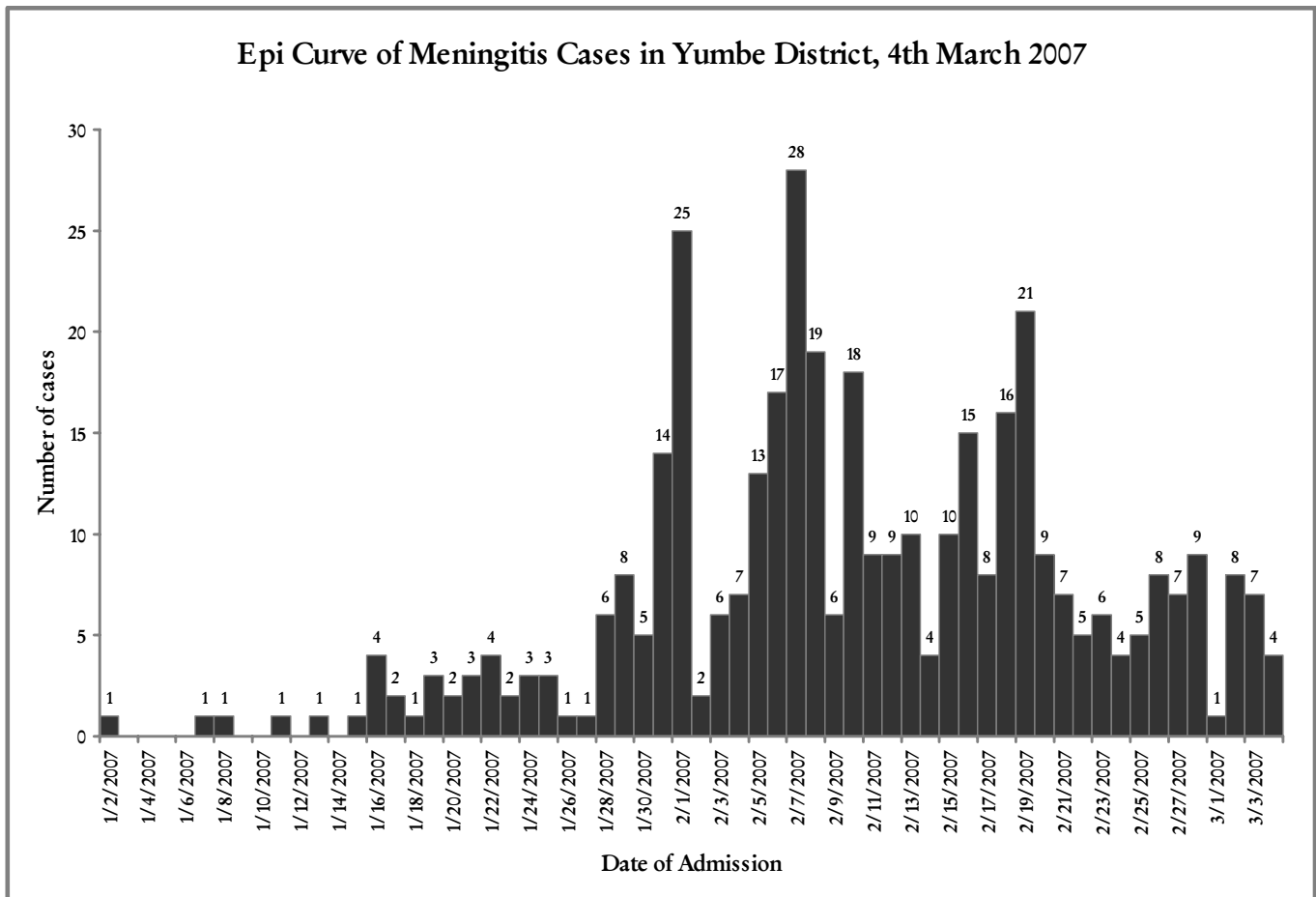
Ludara	23,520	-	-	4	13	13	26	-	-	4	60
<b>Total</b>	<b>163,001</b>	<b>3</b>	<b>12</b>	<b>66</b>	<b>77</b>	<b>40</b>	<b>34</b>	<b>21</b>	<b>7</b>	<b>7</b>	<b>267</b>

The attack rates in all the sub counties in the district are generally declining-an indicator of a receding epidemic.

### 1.2.3. YUMBE DISTRICT

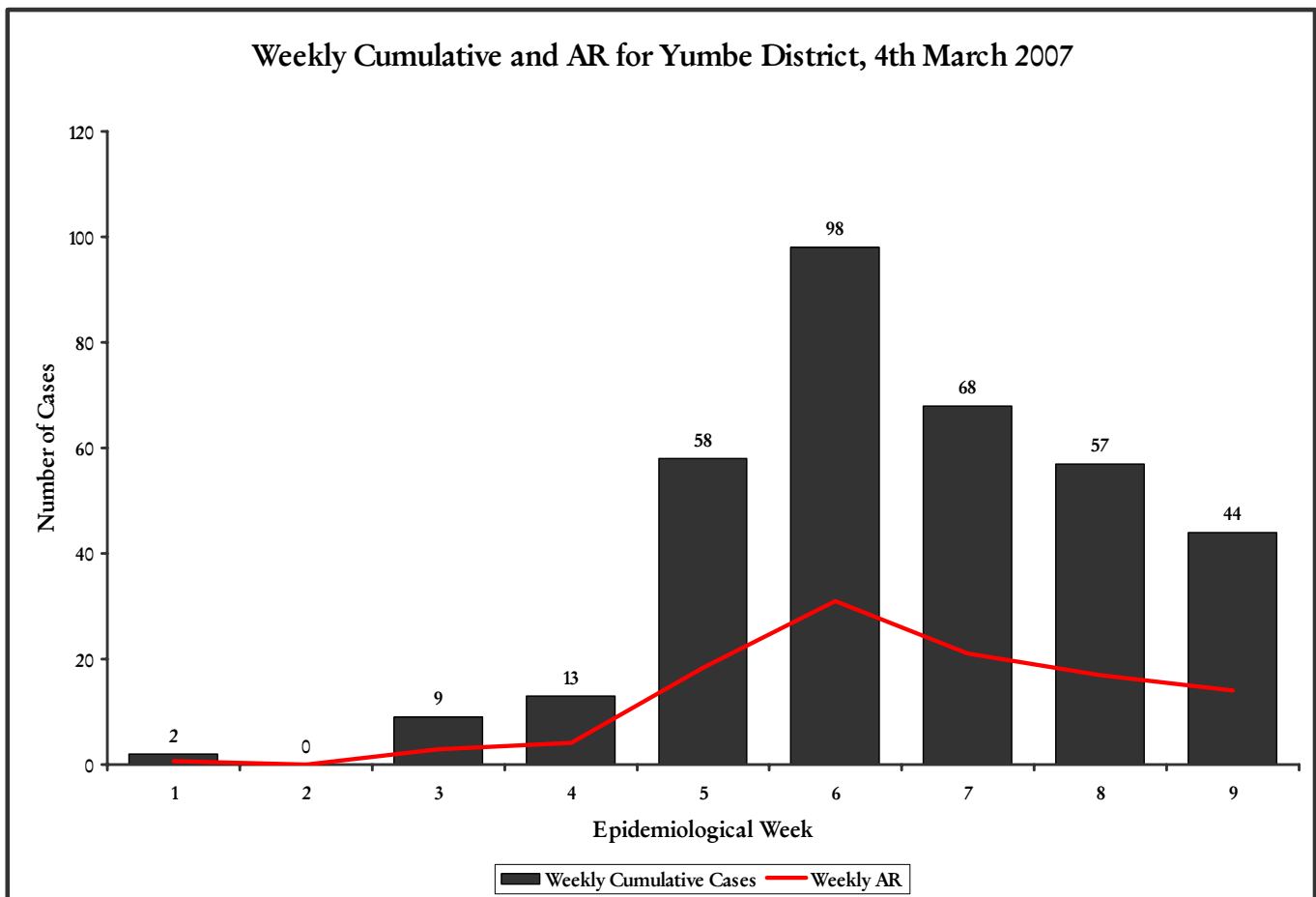
The meningitis epidemic in Yumbe district continued to decline in the last week (26<sup>th</sup> February-4<sup>th</sup> March 2007) as indicated in the epi-curve in figure 1.4. 44 new cases with 1 new death have been reported during this period .A cumulative number of 391 cases with 16 deaths [CFR 4.1%] has been registered to date.

Figure 1.4



The steady decline in the trend of the epidemic is further illustrated by reduction in number of cases registered in the last week (26<sup>th</sup> February- 4<sup>th</sup> March 2007) as shown in the figure 1.5.

Figure 1.5



The weekly and cumulative AR by sub-county is shown in the table below:

**Weekly & Cumulative AR by sub-county in Yumbe District**

Table 1.3

Sub-County	Population	Weekly AR/ 100,000 population	Cumulative AR/ 100,000 population
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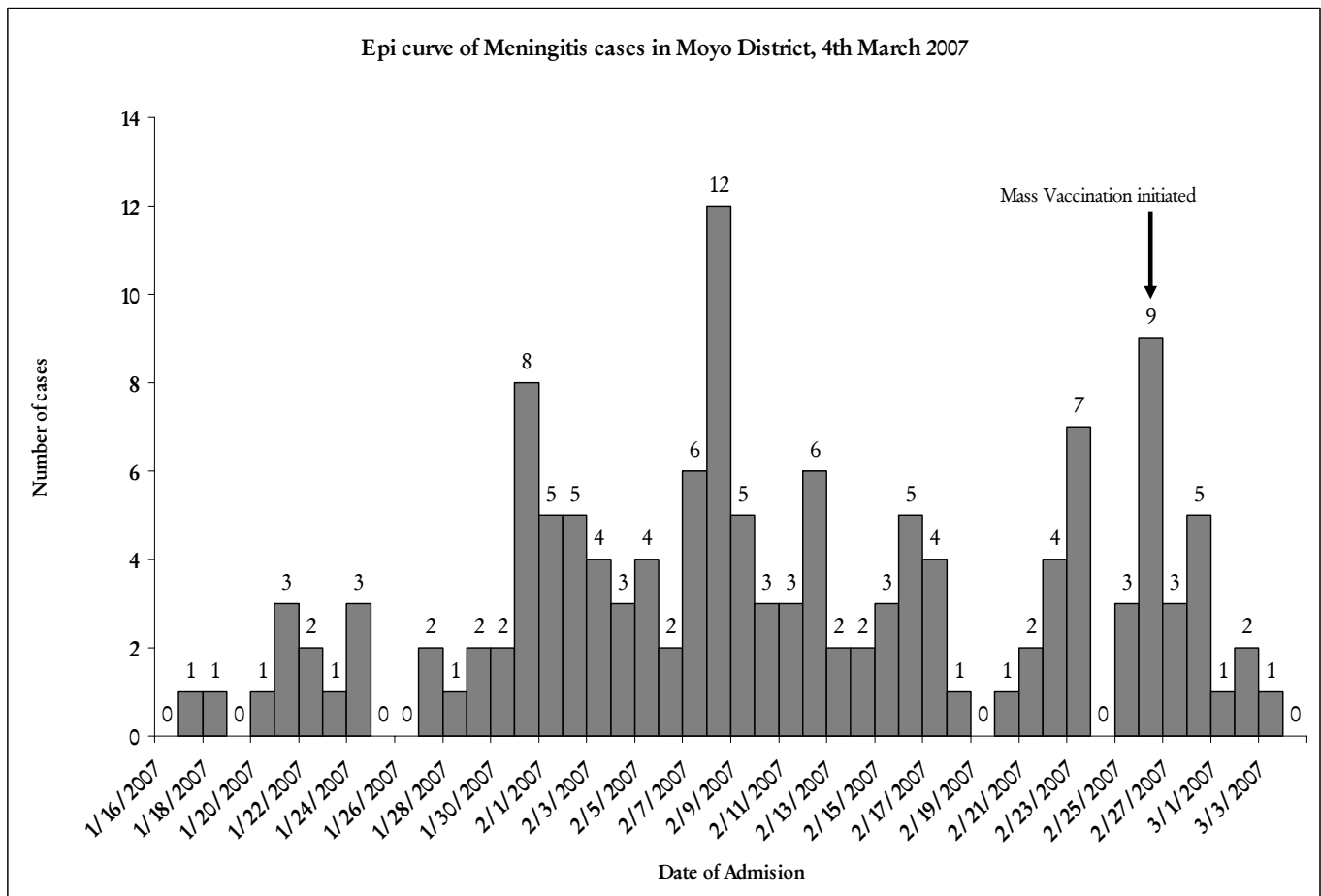
		1	2	3	4	5	6	7	8	9	
Odravo	47,679	2	-	4	10	38	90	42	29	10	218
Drajini	40,767	-	-	-	5	34	69	32	42	49	231
Kei	30,004	-	-	3	7	30	7	10	17	10	80
Kuru	49,838	-	-	4	2	14	8	-	10	18	58
Apo	31,510	-	-	3	-	6	3	16	10	6	44
Yumbe Town Council	19,305	-	-	5	5	5	21	41	16	21	109
Romogi	47,985	2	-	-	-	6	-	4	-	2	15
Midigo	47,985	-	-	4	4	8	27	44	15	-	104
<b>Total</b>	<b>315,073</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>4</b>	<b>18</b>	<b>30</b>	<b>23</b>	<b>17</b>	<b>14</b>	<b>109</b>

The attack rates in all the sub counties in the district are generally declining, except for Drajini and Yumbe town council which shown a slight increment. With vaccination completed in Drajini, the AR is expected to decline soon. Vaccination in Yumbe Town Council starts tomorrow (6<sup>th</sup> March 2007) and should subsequently lead to a decline in the AR over the next couple of weeks

#### 1.2.4. MOYO DISTRICT

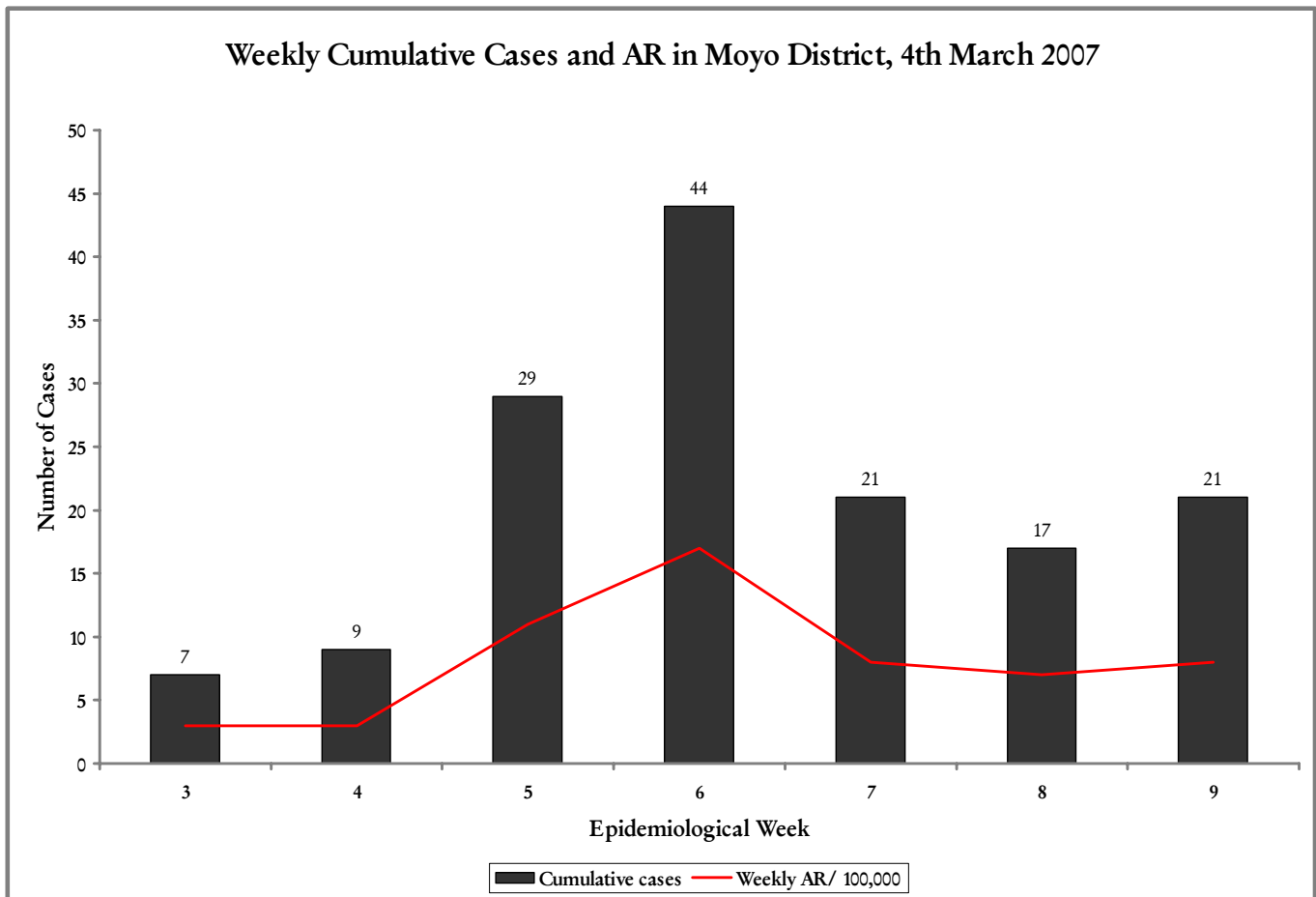
The meningitis epidemic in Moyo district showed little change in the last week (26<sup>th</sup> February-4<sup>th</sup> March 2007) as indicated in the epi-curve in figure 1.6. 21 new cases with 0 new deaths have been reported during this period. A cumulative number of 150 cases with 21 deaths [CFR 4.0%] have been registered to date.

Figure 1.6



The limited change in the epidemic trend is also depicted in the weekly cumulative cases and AR figure 1.7:

Figure 1.7



The Weekly AR by sub-county is shown in table 1.4.

### Weekly & Cumulative AR by Sub-county in Moyo District

Table 1.4

Sub-county	Total Population	Weekly AR/ 100,000 Population							Cumulative AR/ 100,000	
		3	4	5	6	7	8	9		
Gimara	31,358	-	-	16	83	29		16	16	159
Aliba	32,049	3	3	53	16	12		-	3	90
Lefori	23,510	4	-	9	21	13		13	26	85
Itula	53,472	7	11	7	15	7		13	2	64
Dufile	26,713	-	4	-	-	4		-	-	7
Metu	34,907	3	3	-	-	-		3	6	14
Moyo	40,606	-	-	2	-	-		-	10	12
MTC	15,885	-	-	-	-	-		6	13	19
<b>Total</b>	<b>258,500</b>	<b>3</b>	<b>3</b>	<b>11</b>	<b>17</b>	<b>8</b>		<b>7</b>	<b>8</b>	<b>57</b>

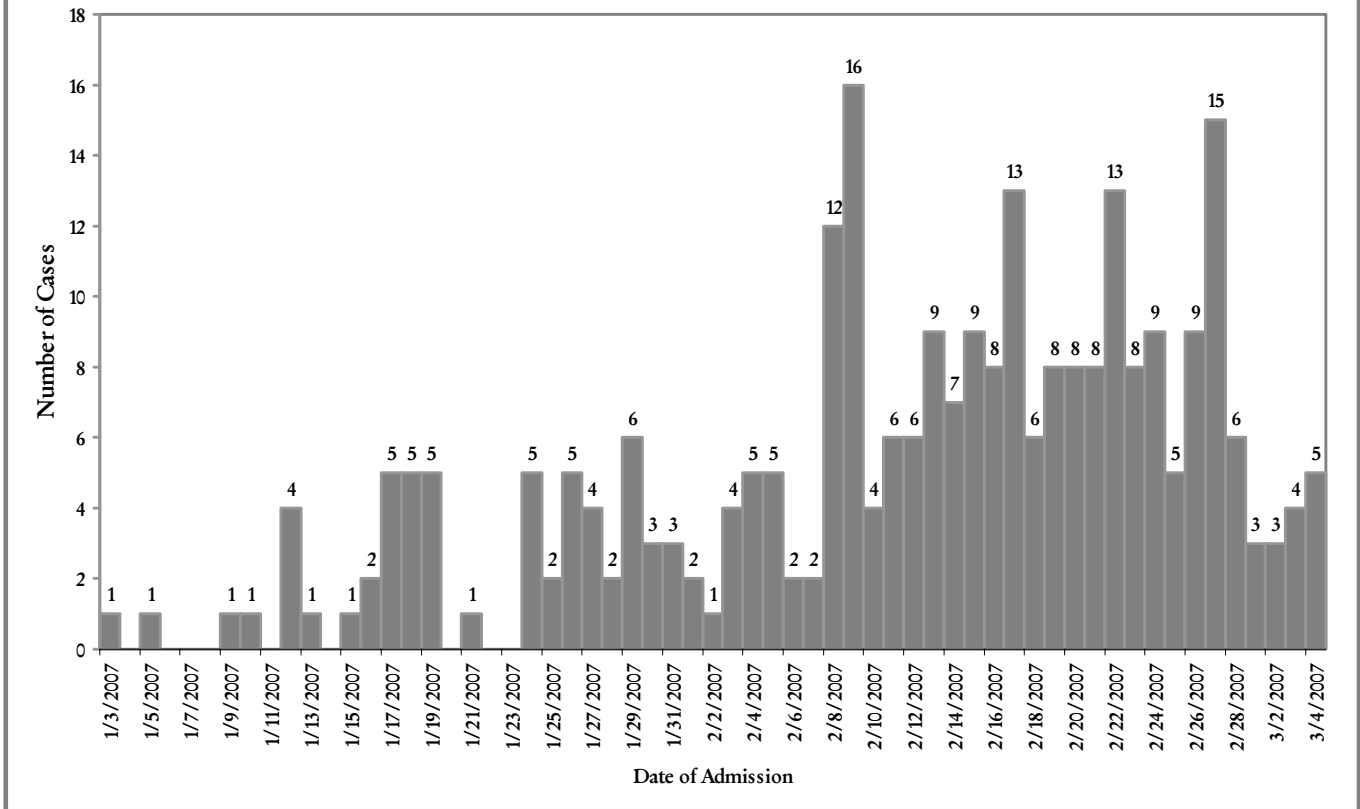
The attack rates in all the sub counties in the district are generally declining, except for Moyo, Moyo town council and Metu which show a slight increment. These sub counties were not vaccinated in the first phase. Vaccination begins tomorrow (6<sup>th</sup> March 2007) in these sub counties and should subsequently lead to a decline in the AR over the next couple of weeks

#### 1.2.5. ADJUMANI DISTRICT

The meningitis epidemic in Adjumani district started declining over the last week (26<sup>th</sup> February-4<sup>th</sup> March 2007) as shown in the epi-curve in figure 1.8. 46 New cases with 4 new deaths have been reported during this period. A cumulative number of 280 cases with 12 deaths [CFR 4.3%] have been registered to date.

Figure 1.8

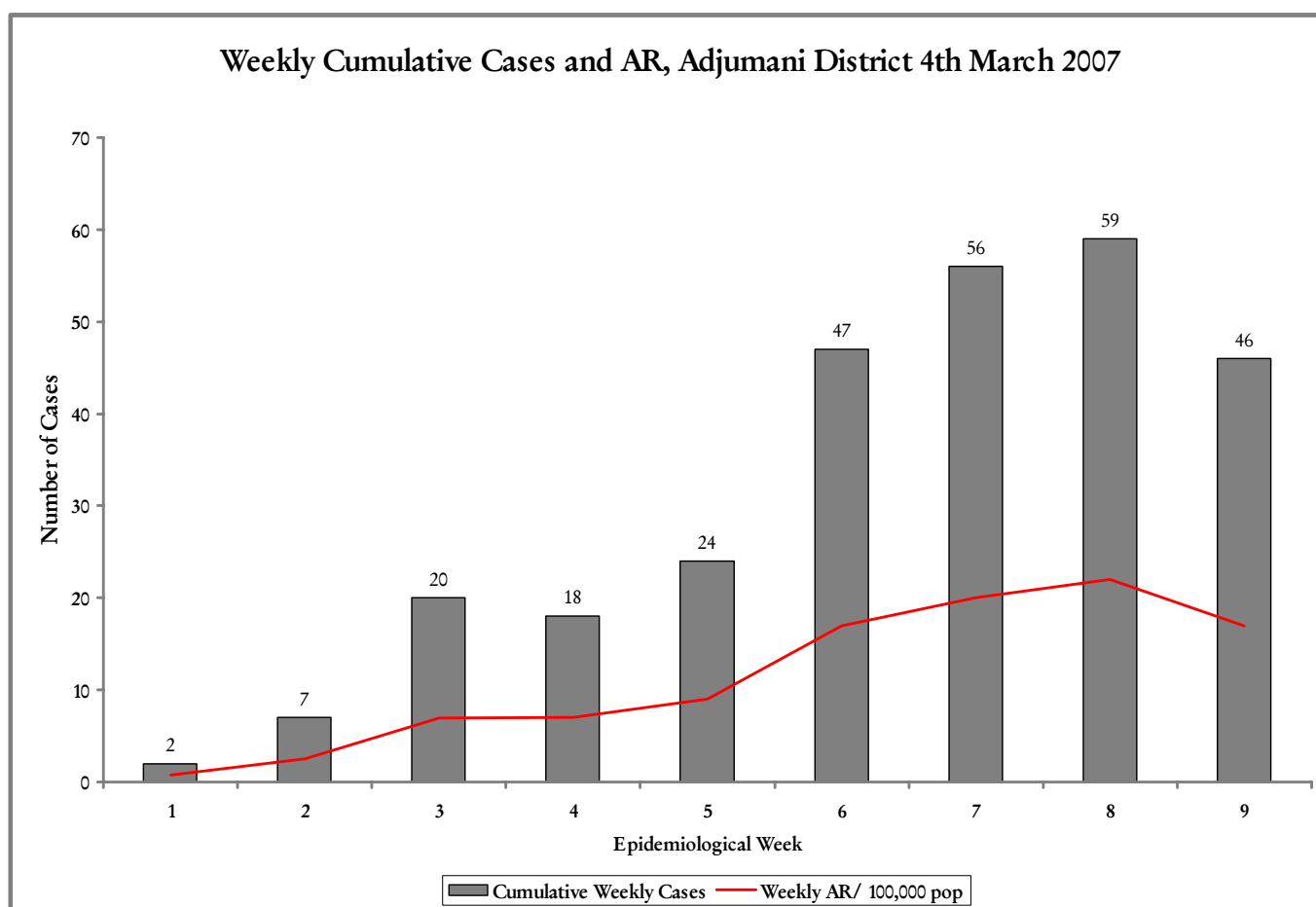
### Epi Curve of Meningitis Cases in Adjumani, 4th March 2007



The weekly cumulative cases and AR shown in figure 1.9, further demonstrates the decline in the trend of the epidemic.

Figure 1.9

Weekly Cumulative Cases and AR, Adjumani District 4th March 2007



Weekly & Cumulative AR by sub-county in Adjumani

Table 1.5

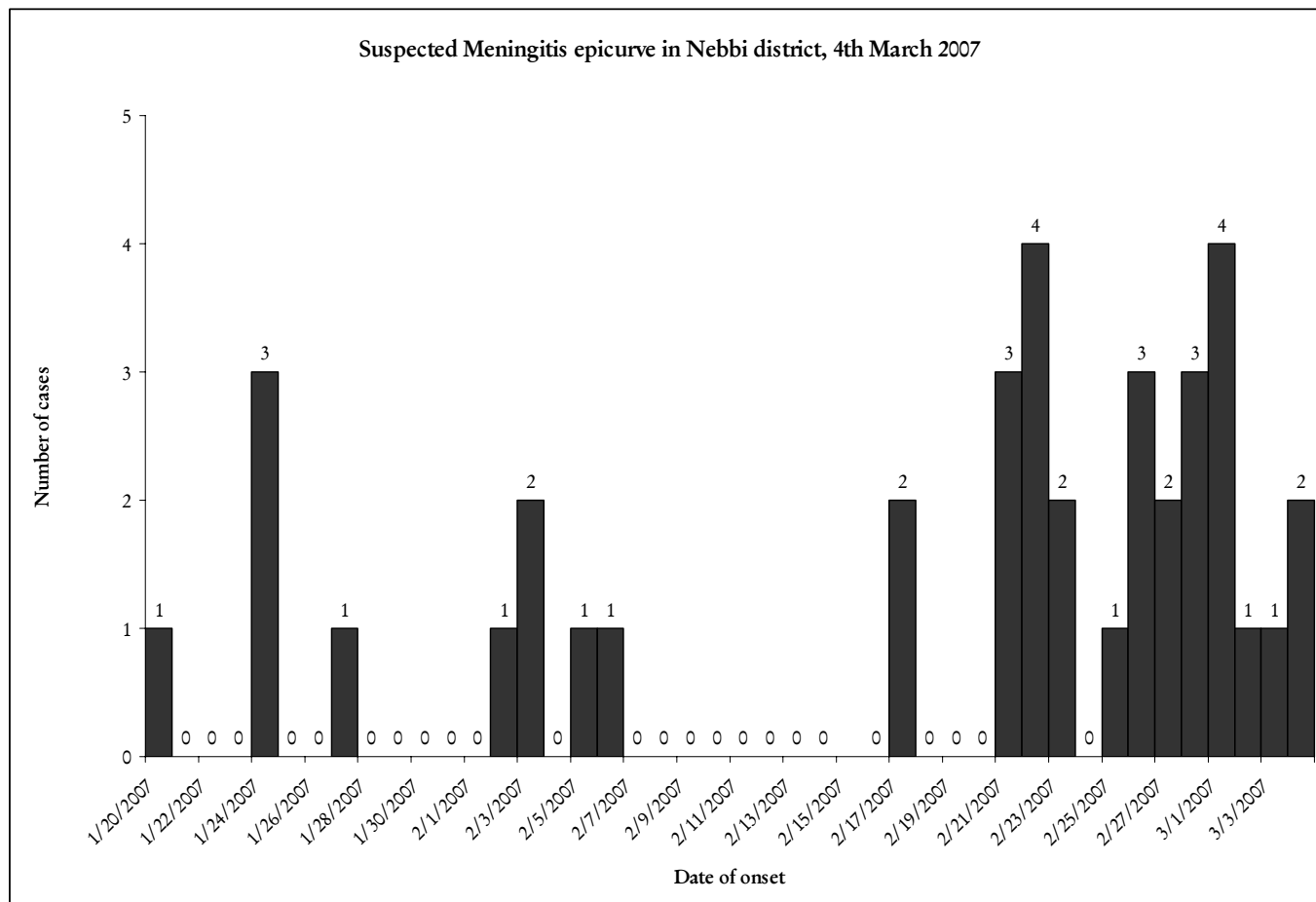
Sub-county	Population	Weekly AR/ 100,000 population									Cumulative AR/ 100,000 population		
		1	2	3	4	5	6	7	8	9			
Ciforo	57,071	-	11	25									
					28	35	58	58	56		32	303	
Adjumani Town Council	27,332	-	4	4									
					4	7	15	26	11	7		77	
Adropi	59,073	-	-	3	-	-	14	17	12		8	54	
Dzaipi	37,641	-	-	-	-	5	3	5	13		-	27	
Ofua	55,424	2	-	4	2	-	2	2	4		25	40	
Pakele	37,403	3	-	-	-	-	3	8	27		19	59	
<b>Total</b>	<b>273,944</b>	<b>1</b>	<b>3</b>	<b>7</b>			<b>7</b>	<b>9</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>17</b>	<b>102</b>

Ciforo sub-county that has refugee settlements remains the worse affected as shown in table 1.5. The attack rates in all the sub counties in the district are generally declining, except for Ofua and Pakele which show a slight increment. These sub counties were not vaccinated in the first phase. Vaccination begins tomorrow (6<sup>th</sup> March 2007) in these sub counties and should subsequently lead to a decline in the AR over the next couple of weeks

1.2.6. NEBBI DISTRICT

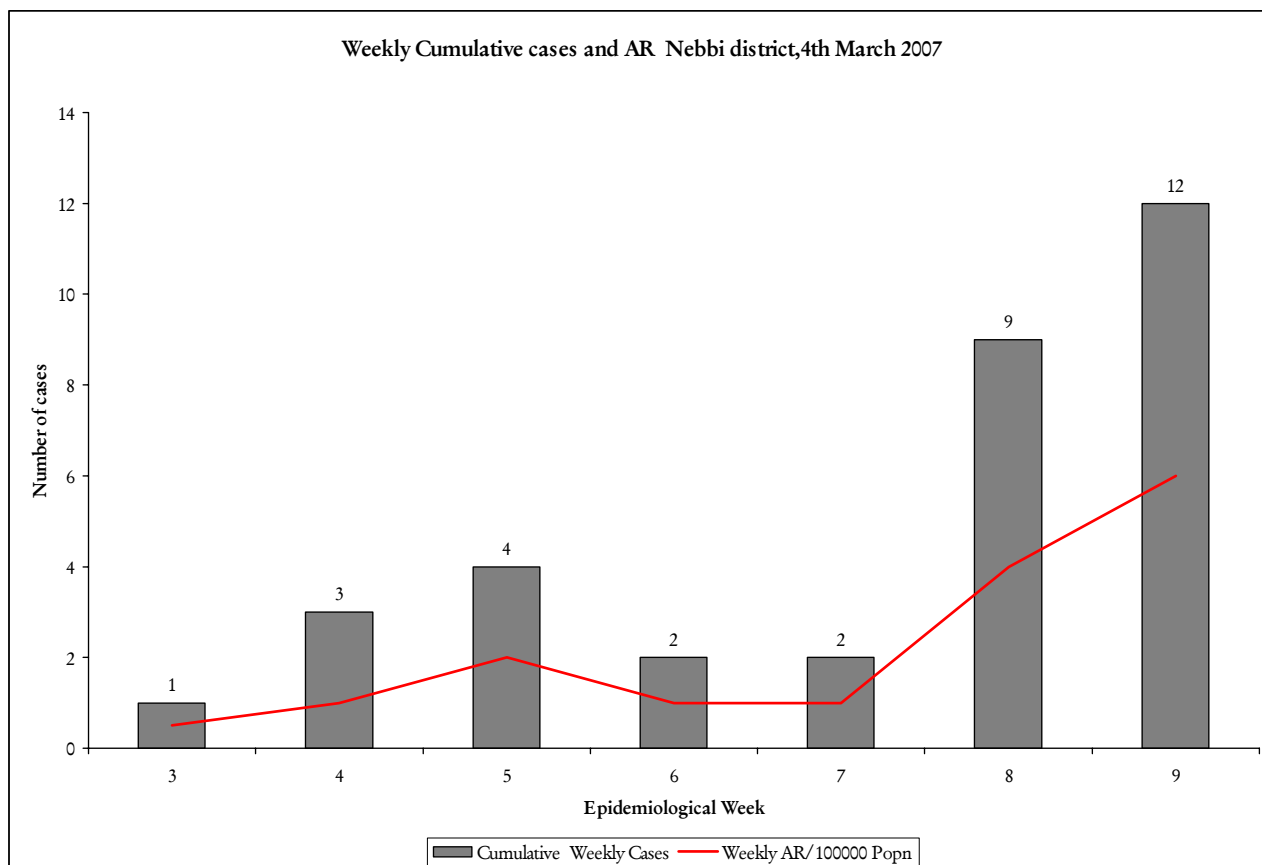
There has been a resurgence of the meningitis epidemic in Nebbi district, specifically in Akworo sub county over the last two weeks (19<sup>th</sup> February to 4<sup>th</sup> March 2007) as shown in the epi-curve in figure 1.10. The majority of cases reported in the district are from Akworo Sub County. A total of 15 new cases were reported last week (26<sup>th</sup> February 2007 -4<sup>th</sup> March 2007), of these 3 are from the neighboring Democratic Republic of Congo. A cumulative number of 40 cases with 7 deaths (CFR 17.5%) have been registered to date.

Figure 1.10



The weekly cumulative cases and AR , figure 1.11 below further demonstrates the resurgence in the trend of the epidemic.

Figure 1.11



The majority of cases reported are from Akworo sub-county as shown by the weekly attack rates in table 1.6..Akworo sub county is above the threshold for vaccination, while Parombo sub county has just attained the threshold lower limit. Vaccination in these sub counties should begin as soon as a case is confirmed.

### Weekly & Cumulative AR by sub-county in Nebbi District

Table 1.6

Sub-county	Population	Weekly AR/ 100,000 population							Cumulative AR/ 100,000 population
		3	4	5	6	7	8	9	
NTC	26418	4	11	0	0	0	0	0	15
PTC	27376	0	0	4	0	0	0	0	4
Atiak	22818	0	0	9	4	0	0	0	13
Kango	30075	0	0	3	3	0	0	0	7
Jangokoro	26012	0	0	0	0	0	0	0	-
Akworo	17692	0	0	0	0	6	51	51	107
Panyimur	23944	0	0	0	0	4	0	0	4
Parombo	28732	0	0	0	0	0	0	10	10
<b>Total</b>	<b>203067</b>	<b>0.5</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>6</b>	<b>16</b>

## **Conclusion:**

The trend of the meningitis epidemic in the West Nile sub-region is on the decline overall. The mass vaccination completed in Arua/ Maracha-Terego and Koboko districts', coupled with completion of the first phase in most sub counties of Yumbe, Moyo and Adjumani districts', should to great extent curtail the epidemic. Nebbi district, however provides emerging foci which if not dealt with immediately, could down play the successes' so far registered in combating the epidemic.

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*5<sup>th</sup> March 2007*