

# South Sudan

## Integrated Disease Surveillance and Response (IDSR)

Epidemiological Update W9 2018 (Feb 26- Mar 04)



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### Cholera

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### Sources of data

1. Weekly IDSR Reporting Form
2. Weekly EWARS Reporting Form
3. Daily cholera line list
4. Event based surveillance form

- Completeness for IDSR reporting at county level was 61% . Completeness for EWARS reporting from IDP sites was 81%.

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- A total of 16 alerts were reported, of which 56% have been verified. 0 alerts were risk assessed and 0 required a response.

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- Rift Valley Fever outbreak - Yirol East with 40 suspect human cases including 6 confirmed; 3 probable; 19 non-cases; and 12 pending classification. Nine confirmed animal cases (cattle).

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- Following the confirmation of a measles outbreak in Aweil East [after four measles IgM positive cases were confirmed on 24 Feb 2018], a reactive measles campaign planned targeting children 6 months to 15 years.

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- Suspect meningitis cases reported in Torit county, Iyire & Imurok payams. Overall at least 166 suspect cases including 30 deaths have been reported. Alert and action thresholds have been surpassed but laboratory confirmation is pending. Current response entails overall coordination, surveillance and laboratory confirmation, case management and social mobilization. Partners - ARC, SCI, SSRC, WHO, Unicef, IOM, MSF-CH are supporting the response.

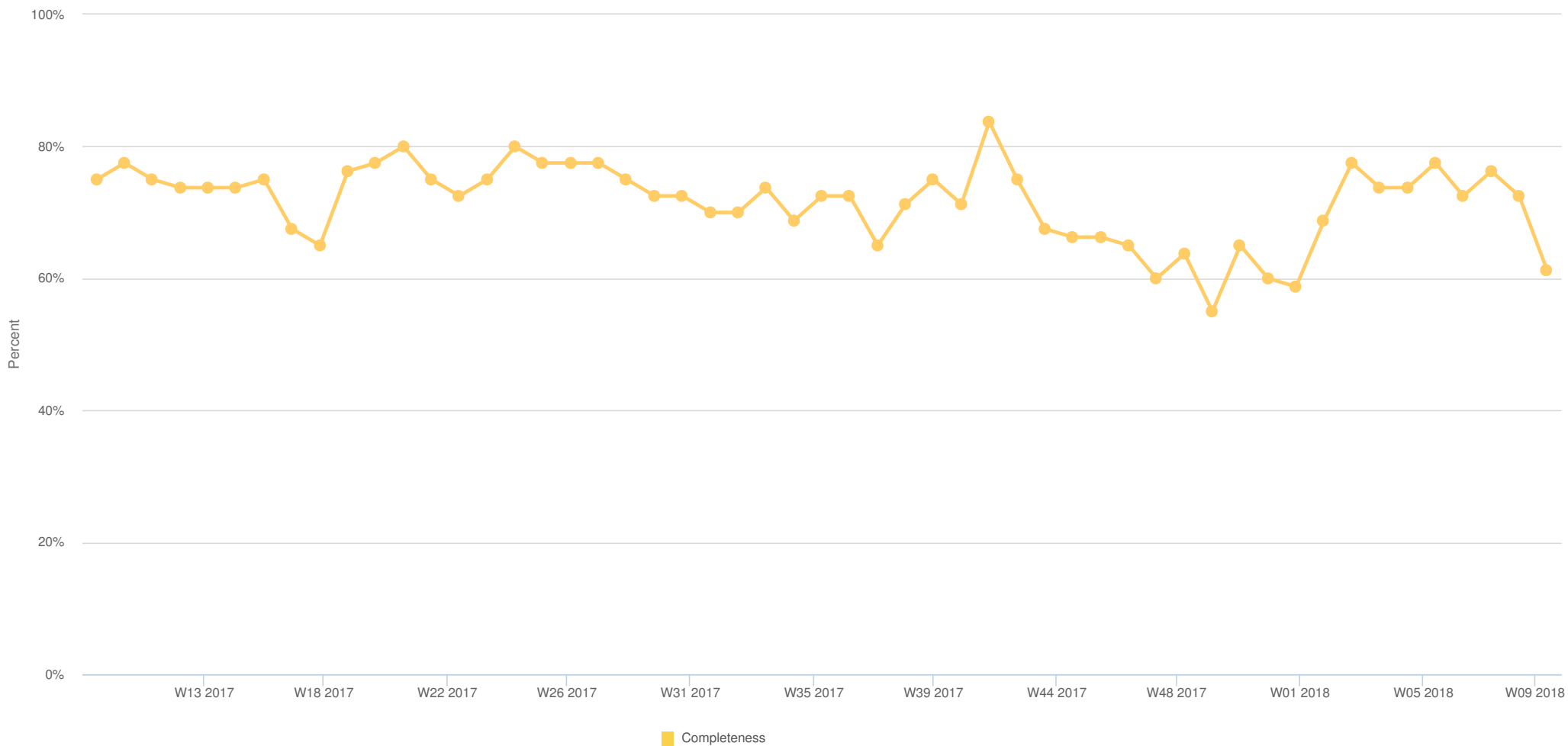
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**Table 1** | IDSR surveillance performance indicators by county (W9 2018)

Hub	Reporting		Performance (W9 2018)		Performance (Cumulative 2018)	
	# counties	# reports received	Completeness	Timeliness	Completeness	Timeliness
Aweil	5	5	100%	100%	98%	98%
Bentiu	9	2	22%	22%	73%	49%
Bor	11	5	45%	45%	52%	41%
Juba	6	4	67%	67%	69%	65%
Kwajok	7	7	100%	100%	100%	90%
Malakal	13	1	8%	8%	20%	6%
Rumbek	8	8	100%	100%	100%	97%
Torit	8	5	63%	63%	86%	68%
Wau	3	3	100%	100%	89%	70%
Yambio	10	9	90%	90%	98%	98%
<b>South Sudan</b>	<b>80</b>	<b>49</b>	<b>61%</b>	<b>61%</b>	<b>73%</b>	<b>61%</b>

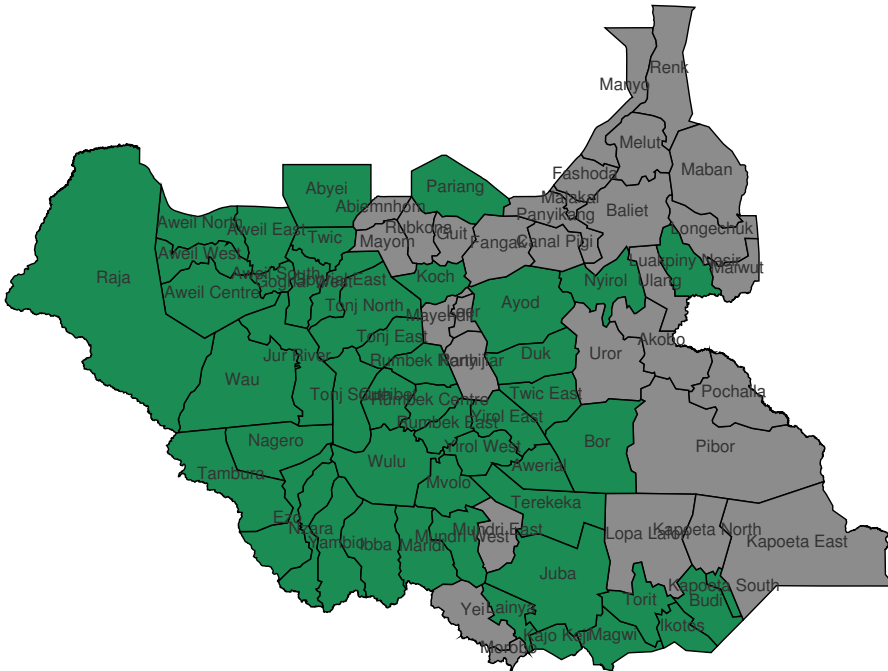
- Completeness for IDSR reporting at county level was 61% in week 9 and cumulatively at 73% for 2018
- Timeliness for IDSR reporting at county level was 61% in week 9 and cumulatively at 61% for 2018

Figure 1 | Trend in IDSR completeness over time<sup>1</sup>

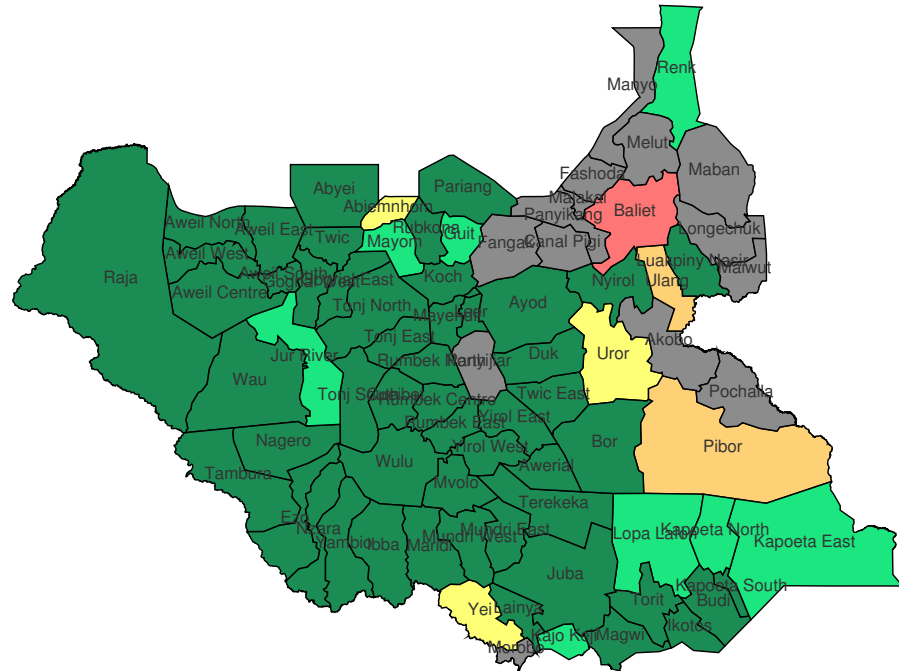


The graph shows completeness for weekly reporting at county level. The national average currently stands at **73%**.

Map 1a | Map of IDSR completeness by county (W9 2018)



Map 1b | Map of IDSR completeness by county (2018)



- Counties that submitted IDSR reports in W9 are shown in green in map 1a
- Counties that did not submit IDSR reports in W9 are shown in grey in map 1a

**Table 4** | EWARS surveillance performance indicators by partner (W9 2018)

Partner	Performance		Reporting (W9 2018)		Reporting (Cumulative 2018)	
	# sites	# reports received	Completeness	Timeliness	Completeness	Timeliness
CMD	2	2	100%	100%	100%	100%
GOAL	2	2	100%	100%	100%	67%
HLSS	1	1	100%	100%	100%	100%
IMA	4	4	100%	100%	100%	81%
IMC	6	4	67%	67%	65%	63%
IOM	10	10	100%	100%	79%	79%
IRC	1	1	100%	100%	100%	100%
Medair	2	0	0%	0%	89%	89%
MSF-E	2	2	100%	100%	89%	78%
MSF-H	2	1	50%	50%	50%	39%
SMC	4	4	100%	100%	78%	75%
UNIDO	1	1	100%	100%	100%	100%
UNKEA	2	2	100%	100%	67%	67%
World Relief	1	0	0%	0%	67%	67%
<b>Total</b>	<b>42</b>	<b>34</b>	<b>81%</b>	<b>81%</b>	<b>77%</b>	<b>72%</b>

Timeliness and completeness for EWARN/IDP reporting stands at 81% for week 9 while cumulatively, completeness and timeliness are 77% and 72% respectively for 2018

**Table 7 | Alert performance indicators by Hub**

Hub	W9		Cumulative (2018)	
	# alerts	% verif.	# alerts	% verif.
Aweil	1	100%	15	67%
Bentiu	1	0%	13	69%
Bor	1	100%	17	35%
Juba	2	50%	17	53%
Kwajok	3	100%	15	100%
Malakal	2	0%	11	27%
Rumbek	0	0%	13	23%
Torit	1	100%	16	38%
Wau	0	0%	7	29%
Yambio	5	40%	26	35%
<b>South Sudan</b>	<b>16</b>	<b>56%</b>	<b>150</b>	<b>48%</b>

**Table 8 Summary of key alert indicators**

W9	Cumulative (2018)	
<b>16</b>	<b>150</b>	Total alerts raised
<b>56%</b>	<b>48%</b>	% verified
<b>0%</b>	<b>0%</b>	% auto-discarded
<b>0%</b>	<b>3%</b>	% risk assessed
<b>0%</b>	<b>1%</b>	% requiring a response

A total of 16 alerts were reported in week 9 [majority from Kwajok; Juba; and Malakal hubs]. 56% of the alerts in week 9 were verified; 0% were risk assessed and 0% required a response.



**Table 9 | Alert performance indicators by event**

Event	W9		Cumulative (2018)	
	# alerts	% verif.	# alerts	% verif.
<b>Indicator-based surveillance</b>				
Malaria	1	0%	19	63%
AWD	4	50%	115	41%
Bloody Diarr.	4	25%	43	38%
Measles	3	100%	30	63%
Meningitis	0	0%	0	0%
Cholera	1	100%	2	100%
Yellow Fever	0	0%	1	0%
Guinea Worm	0	0%	5	60%
AFP	2	50%	39	67%
VHF	0	0%	0	0%
Neo. tetanus	0	0%	2	50%
<b>Event-based surveillance</b>				
EBS total	1	100%	8	63%

**Table 10 | Event risk assessment**

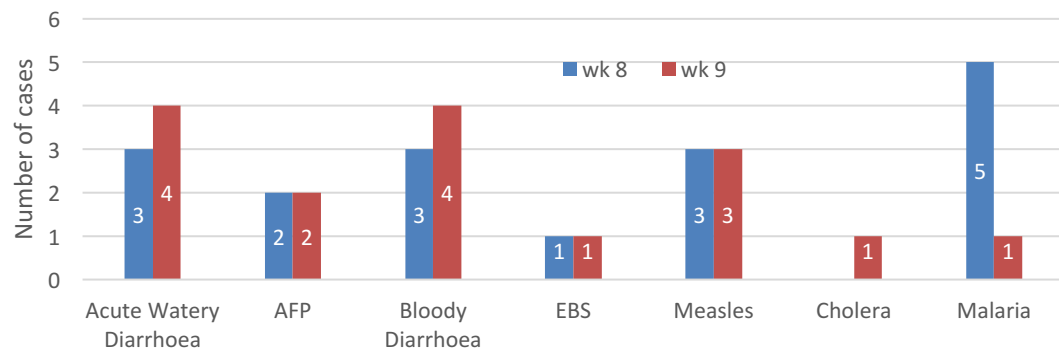
W9	Cumulative (2018)	
0	4	Low risk
1	1	Medium risk
0	0	High risk
0	0	Very high risk

- During the week, acute watery and bloody diarrhoea, measles were the most frequent infectious hazards reported.

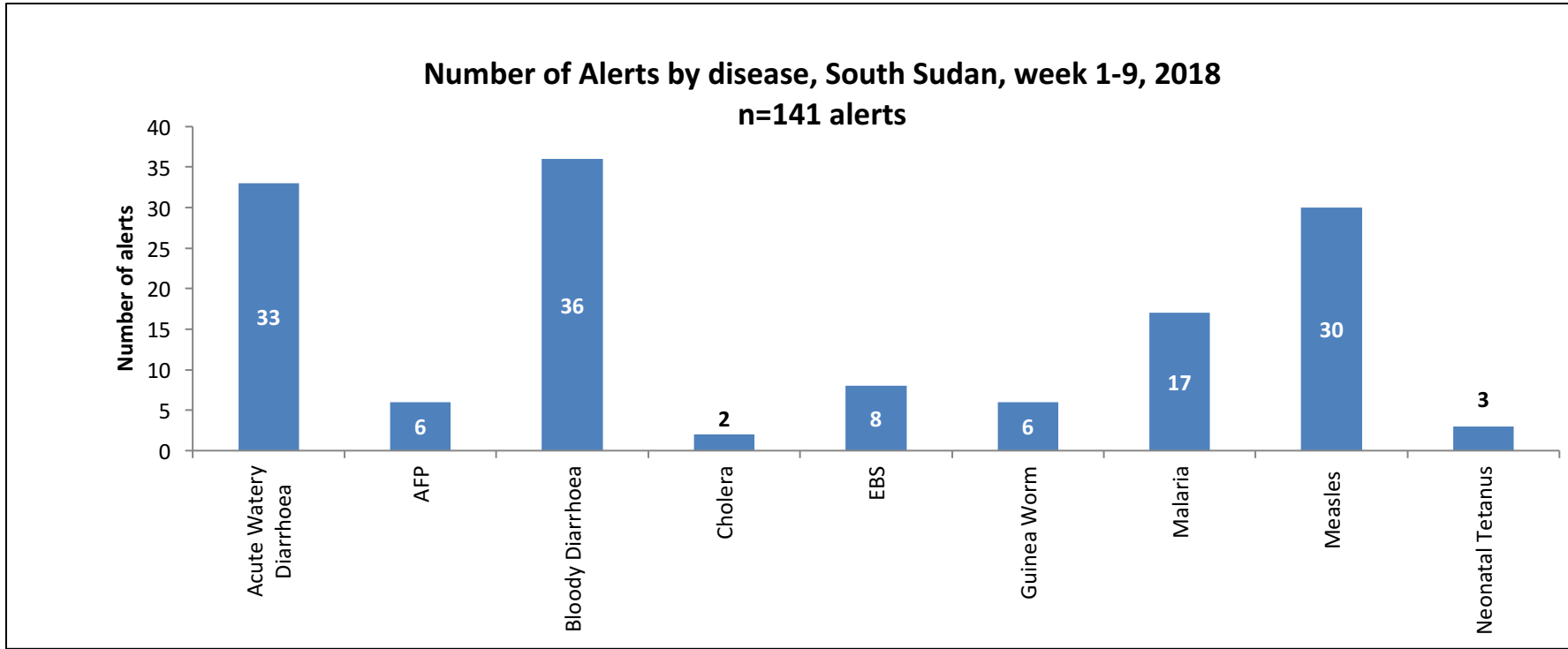
## Alert by disease and county in W8 2018

County	Acute Watery Diarrhoea	AFP	Bloody Diarrhoea	EBS	Measles	Cholera	Malaria	Total Alerts
Abyei					1			1
Aweil East					1			1
Bor	1							1
Gogrial West		1						1
Ibba	1							1
Juba			1		1			2
Koch			1					1
Manyo							1	1
Tambura	1		1					2
Tonj East						1		1
Torit				1				1
Yambio		1	1					2
Melut	1							1
<b>Total Alerts</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>16</b>

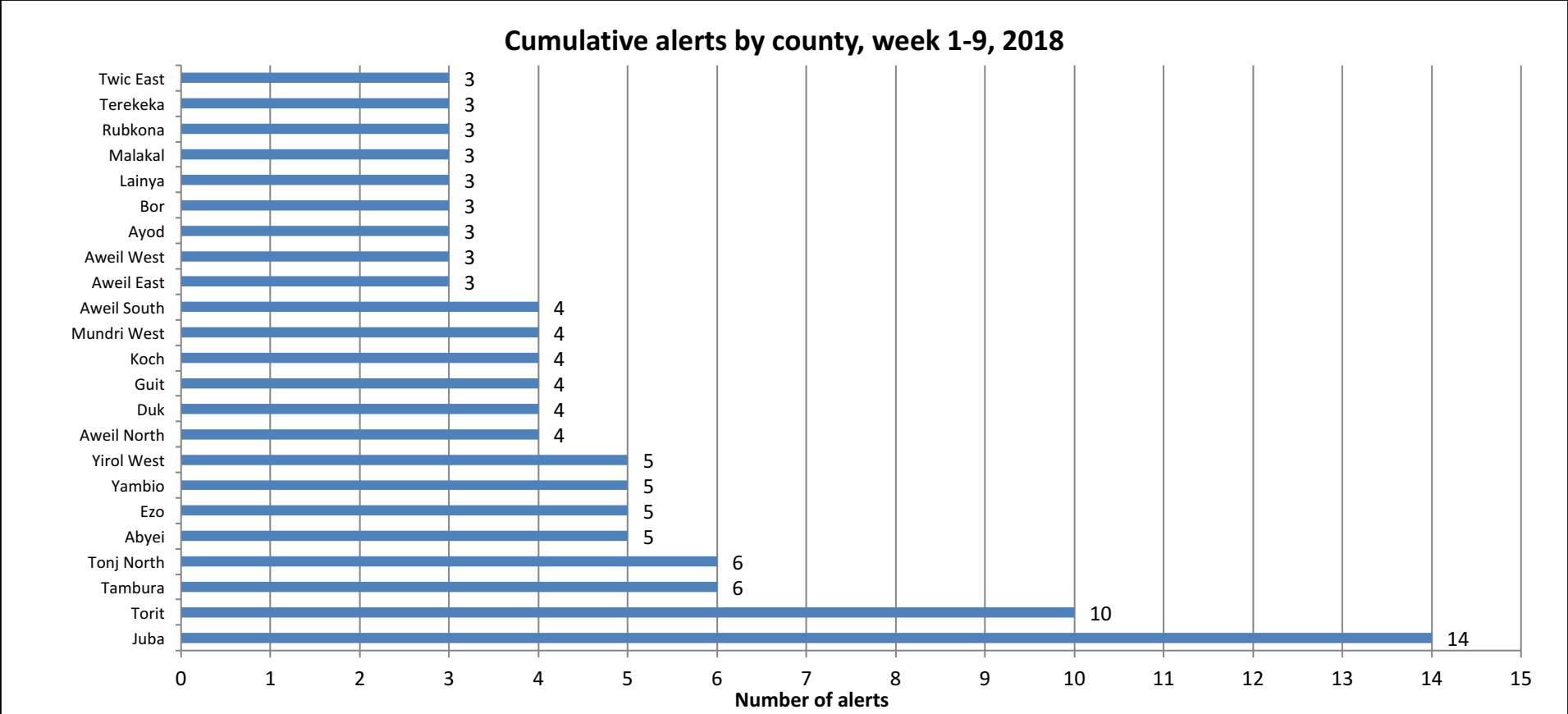
Alerts by hazard in week 8 and week 9, 2018



- During week 9, a total of 16 alerts were reported.
- Acute watery diarrhoea alerts were reported from Bor, Ibba, Tambura, and Melut are undergoing verification
- Acute bloody diarrhoea alerts were reported from Juba,, Koch, Tambura, and Yambio are undergoing verification
- Three measles alerts were reported from Abyei, Aweil East, and Juba have been investigated.
- A suspect cholera case reported from Tonj East is being verified.



• The Figure shows the cumulative number of alerts triggered in 2018 by hazard and location.

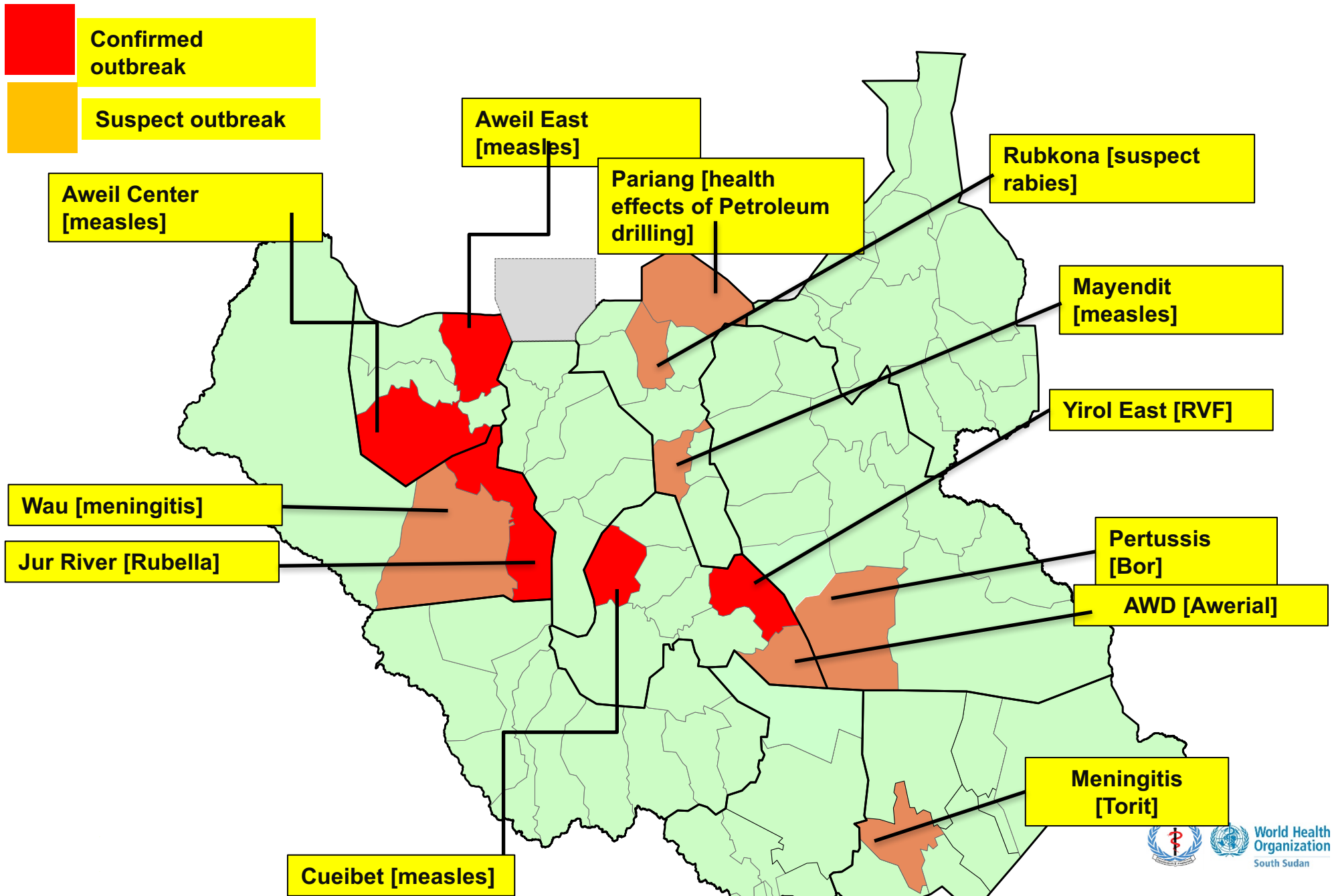


- The Figures show the cumulative alerts triggered in 2018 by location
- Most alerts have been reported from Juba and Torit.

County	OUTCOME	RISK_ASSESS	VERIFICATION	Total Alerts
Acute Watery Diarrhoea			33	33
AFP		1	5	6
Bloody Diarrhoea			36	36
EBS		1	7	8
Guinea Worm	2		4	6
Neonatal Tetanus	2		1	3
Measles	4	3	23	30
Cholera			2	2
Malaria			17	17
<b>Total Alerts</b>	<b>8</b>	<b>5</b>	<b>128</b>	<b>141</b>

- The Figures show the cumulative alerts by risk assessment state in 2018
- Of the 141 alerts reported in 2018; a total of 128 alerts are at verification stage; and the rest are at risk assessment stage (5 alerts); 8 at outcome stage.

# Suspect and Confirmed Outbreaks South Sudan – 11 March 2018



Aetiologic agent	Location (county)	Date first reported	New cases since last bulletin	Cumulative cases to date (attack rate %)	Interventions			
					Case management	Vaccination	Health promotion	WASH
<b>New epidemics: no new epidemics</b>								
<b>Ongoing epidemics:</b>								
Measles	Aweil Center	6/Jan/2018	8	22 (0.02)	Yes	Yes	Yes	N/A
<b>RVF</b>	Yirol East	28/12/2017	1	32 (0.03)	Yes	N/A	Yes	N/A
Measles	Cueibet	14/10/2017	0	20 (0.012)	Yes	Yes	Yes	N/A
<b>Measles</b>	Aweil East	05/02/2018	4	21 (0.005)	Yes	No	Yes	N/A
<b>Rubella</b>	Jur River	14/02/2018	0	22 (0.011)	Yes	No	Yes	N/A

## Epidemics - Update

- Measles was confirmed in Aweil East after **four samples tested measles IgM positive** on 24 Feb 2018. A total of 17 measles cases have been line listed. IOM will support IRC the local implementing partner to conduct the reactive measles campaign. MSF to support cold chain. Target age group will include children 6months to 15 years.
- Reactive measles campaign completed in Cueibet. The campaign was led by the CHD supported by partners – HPF, CUAMM, Unicef, & WHO. The administrative coverage was 58,842 (87%)
- In Aweil Center; a reactive measles vaccination campaign targeting under fives has been completed. Campaign led by two – partners – MedAir and MSF-F. Coverage data is being analyzed and plans are underway to conduct a coverage survey.

## Ongoing epidemics - Epidemic description - RVF Eastern Lakes state

Sno.	Description	Number
1	Suspect cases	40
2	Total deaths	4
3	Confirmed cases	6
4	Probable cases	3
5	Cases pending testing	12
6	Non-cases	19
7	Cases on admission	0
8	Total human samples collected	34
9	Total animal samples collected	28
10	Positive animal cases	9

- A total of four suspect cases were reported and investigated from Yirol East in week 10.
- In the period 7 December 2017 to 9 March 2018, a total of 40 suspect RVF cases were reported in Eastern Lakes.
- These were reclassified based on investigations and laboratory results, such that as of 9<sup>th</sup> March 2018, there were a total of six (6) RVF confirmed cases, three (3) probable, and twelve (12) suspect RVF cases (laboratory results are pending).
- Nineteen (19) cases were discarded as non-cases following negative laboratory results for RVF and other common causes of viral haemorrhagic fever.
- A total of nine animal samples have been confirmed serologically (3IgM and 6IgG).
- Current response entails surveillance, laboratory testing, supportive care for suspect cases, and community sensitization on hygienic animal handling



Response | Suspect outbreaks being investigated

Date of report	Disease suspected	Number cases (deaths)	County	Payam	Status of investigations
6Mar18	Acute watery diarrhoea	16 (00)	Awerial	Pirchuk	WHO Rumbek state hub reported rumors of acute watery diarrhoea and vomiting in Pirchuk cattle camp (Awerial county). CHD team dispatched to conduct initial verification. At least 16 AWD cases were reported in the cattle camp with no deaths. All had improved and hence no samples were obtained.
17Feb18	Meningitis	166 (30)	Torit	Iyire and Imurok	After rumors of strange illness in Iyire, several RRT verification and response missions have been undertaken since 20Feb18. Suspect meningitis cases continue to be reported in Iyire and Imurok payams. Torit county surpassed in the alert and epidemic thresholds in week 6 and week 9 respectively. Conclusive laboratory confirmation underway. Overall coordination, case surveillance, line listing, and investigation are underway. Case management underway in Kormush PHCU with support from Save the Children. RRT deployed to support local response by MoH, CHD and partners - WHO, Unicef, SCI, ARC, CARE, HLSS, and SSRC.
16Feb18	Health effects of petroleum drilling	Unspecified	Pariang	Pariang	A newswire indicates the Mayor of Pariang in Ruweng State has appealed to the Ministry of Health to establish some health conditions affecting people in the oil producing area. <a href="https://bit.ly/2EIndTP">bit.ly/2EIndTP</a> #SouthSudan. Initial verification details to follow

Response | Suspect outbreaks being investigated

Date of report	Disease suspected	Number cases (deaths)	County	Payam	Status of investigations
14Feb18	meningitis	07(03)	Wau (Jur River)	Udici, Roc Roc Dong	Since 14 February; seven suspect meningitis cases have been reported from Wau and Jur River counties. The most recent suspect case involved a 45 year old male from Jur River that was admitted in Comboni hospital on the 28 Feb 2018. Rapid pastorex testing was positive for <i>Streptococcus pneumoniae</i> .

Response | Suspect outbreaks being investigated

Date of report	Disease suspected	Number cases (deaths)	County	Payam	Status of investigations
14Feb18	pertussis	Unspecified	Bor	Baidit (Bongo, Mayen, Kwei, Anuak	Alerts of whooping cough reported from Baidit Payam (Bongo & Mayen Bomas. Other alerts reported from Kwei Boma and Anuak (a swampy area/island/fishing camp only accessible by speed boat). These locations have no health implementing partner presence. Investigations planned by the RRT to accessible areas (further updates to follow).
25Jan18	Rabies	28(2)	Rubkona	Bentiu PoC	Rabies surveillance and response is ongoing. Current response entails post-exposure prophylaxis; community awareness (radio & IEC message dissemination) on rabies prevention and early care seeking following bite incidences. Camp management, IOM, VSF Suisse, & UNMISS are holding consultations on dog curling.
19Jan18	measles	01	Mayendit	Rubkuai	One suspect measles cases from Rubkuai in Mayendit tested measles IgM positive. Measles follow up campaign in Leer and Mayendit has been completed by MedAir; MSF-Holland; and UNIDO with support from Unicef and WHO. Plans underway to conduct a coverage survey.

**For more help and support,  
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## Notes

WHO and the Ministry of Health gratefully acknowledge health cluster and health pooled fund (HPF) partners who have reported the data used in this bulletin. We would also like to thank ECHO and USAID for providing financial support.

The data has been collected with support from the EWARS project. This is an initiative to strengthen early warning, alert and response in emergencies. It includes an online, desktop and mobile application that can be rapidly configured and deployed in the field. It is designed with frontline users in mind, and built to work in difficult and remote operating environments. This bulletin has been automatically published from the EWARS application.

More information can be found at <http://ewars-project.org>

