

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Epidemiological Update W3 2018 (Jan 15-Jan 21)



Ministry of Health
Republic of South Sudan

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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 is 59% at county level and 77% for the IDP sites.

- A total of 29 alerts were reported, of which 28% have been verified. 0 alerts were risk assessed and 0 required a response.

- Rift Valley Fever outbreak - Yirol East with 20 suspect human cases including 3 confirmed; 3 probable; 4 none-cases; and 10 pending classification. One confirmed animal case (cow).

- Measles in Panyijiar is on the decline; a reactive campaign is underway in Cueibet county; and investigations are underway into the suspect measles outbreaks in Kiyala payam, Torit county; and Aweil Center.

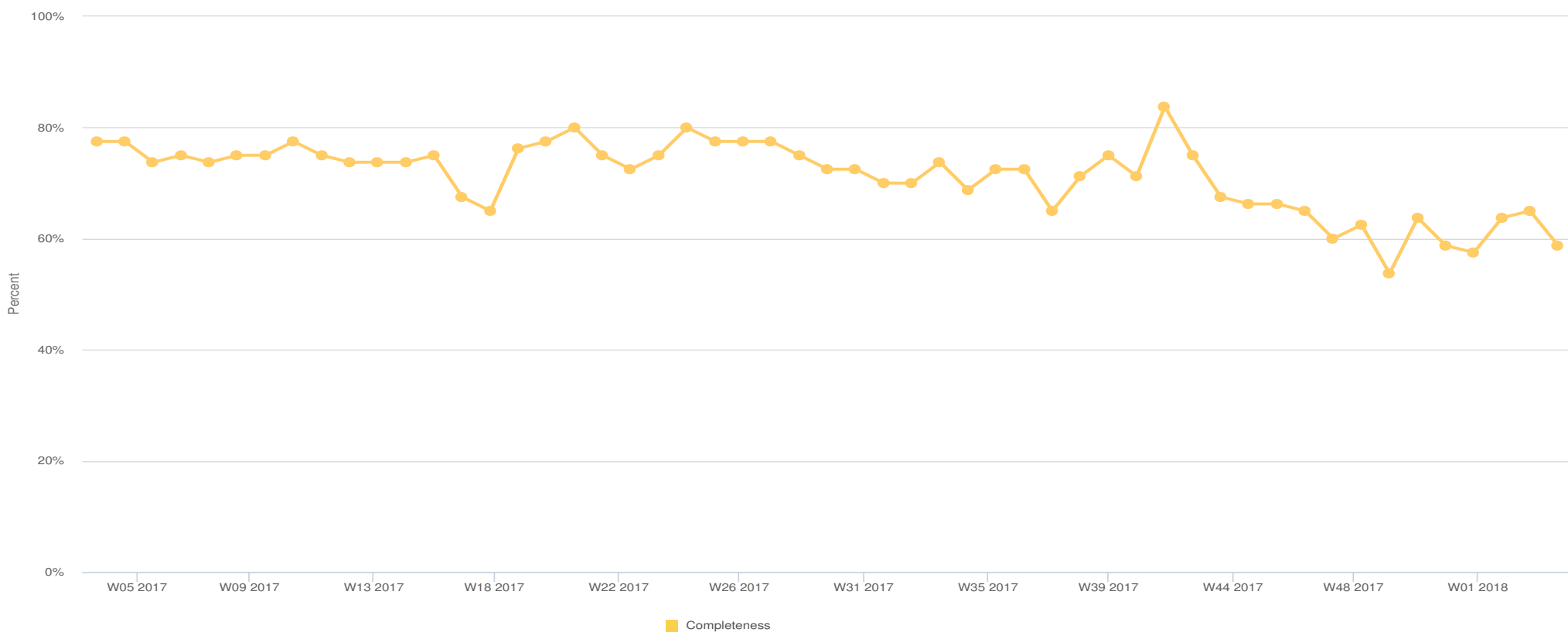
- A total of 0 new cholera cases and 0 deaths (CFR 0.0%) were reported. The cumulative total since the start of the current outbreak on 18 June 2016 is 20,438 cases and 436 deaths (CFR 2.13%).

Table 1 | IDSR surveillance performance indicators by county (W3 2018)

Hub	Reporting		Performance (W3 2018)		Performance (Cumulative 2018)	
	# counties	# reports received	Completeness	Timeliness	Completeness	Timeliness
Aweil	5	5	100%	100%	100%	100%
Bentiu	9	3	33%	33%	33%	26%
Bor	11	3	27%	27%	45%	24%
Juba	6	5	83%	83%	83%	72%
Kwajok	7	5	71%	71%	90%	76%
Malakal	13	1	8%	8%	8%	3%
Rumbek	8	8	100%	100%	100%	92%
Torit	8	5	63%	63%	63%	63%
Wau	3	2	67%	67%	67%	67%
Yambio	10	10	100%	100%		97%
South Sudan	80	47	59%	59%	63%	59%

- Completeness for IDSR reporting at county level was 59% in week 3 and cumulatively at 63% for 2018
- Timeliness for IDSR reporting at county level was 59% in week 3 and cumulatively at 59% for 2018

Figure 1 | Trend in IDSR completeness over time¹

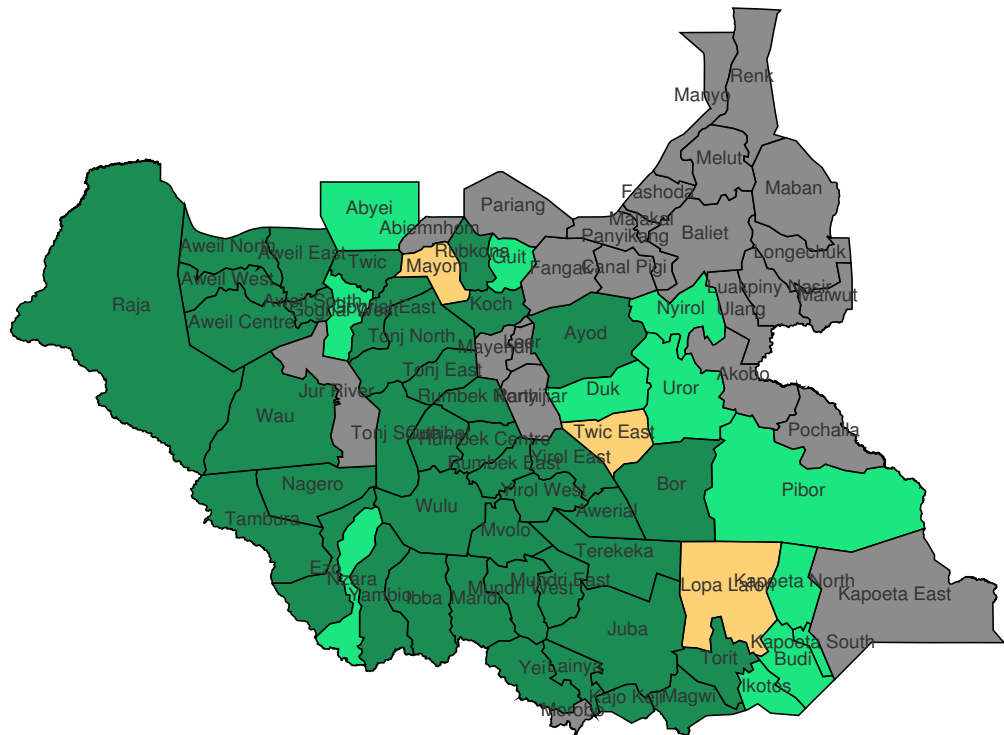
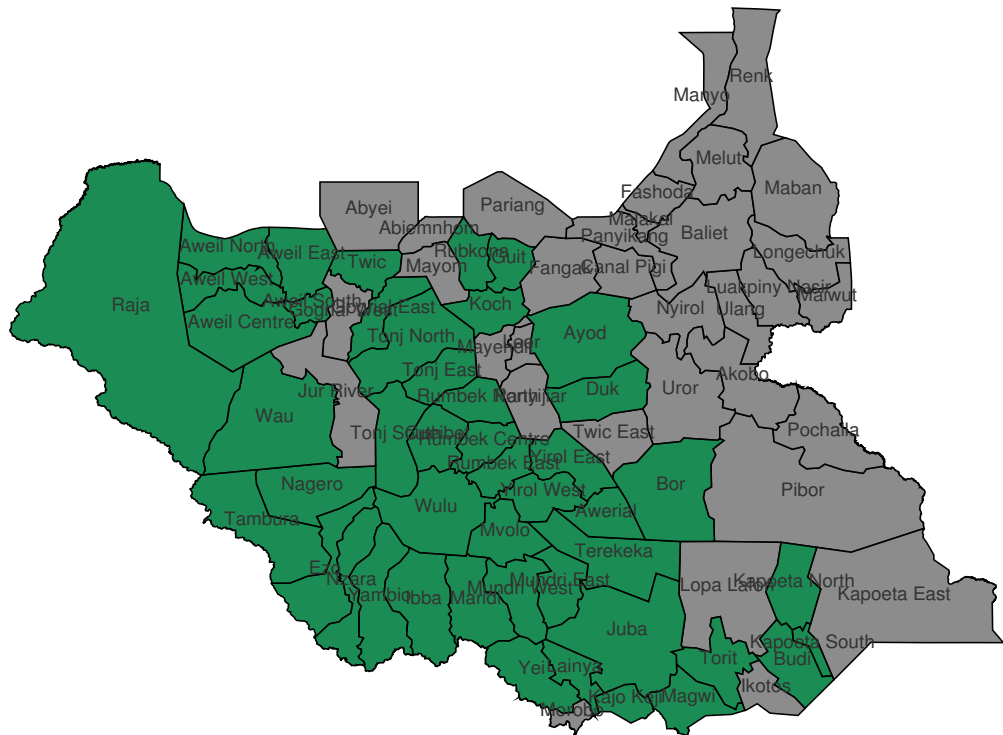


¹ Completeness footnote (to be drafted)

The graph shows completeness for weekly reporting at county level. The national average currently stands at 63%.

Map 1a | Map of IDSR completeness by county (W3 2018)

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



- Counties that submitted IDSR reports in W3 are shown in green in map 1a
- Counties that did not submit IDSR reports in W3 are shown in grey in map 1a

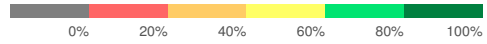
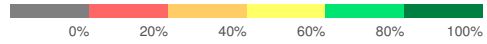


Table 4 | EWARS surveillance performance indicators by partner (W3 2018)

Partner	Performance		Reporting (W3 2018)		Reporting (Cumulative 2018)	
	# sites	# reports received	Completeness	Timeliness	Completeness	Timeliness
CMD	2	2	100%	100%	100%	100%
GOAL	2	2	100%	100%	33%	33%
HLSS	1	1	100%	100%	100%	100%
IMA	4	1	25%	25%	67%	50%
IMC	8	6	75%	75%	71%	71%
IOM	7	7	100%	100%	100%	100%
IRC	1	1	100%	100%	100%	100%
Medair	2	2	100%	100%	100%	100%
MSF-E	2	1	50%	50%	83%	83%
MSF-H	1	0	0%	0%	67%	67%
SMC	3	3	100%	100%	89%	89%
UNIDO	1	1	100%	100%	100%	100%
UNKEA	2	2	100%	100%	33%	33%
World Relief	1	1	100%	100%	100%	100%
Total	39	30	77%	77%	76%	74%

Timeliness and completeness for EWARN/IDP reporting stands at 77% for week 3 while cumulatively, completeness and timeliness are 76% and 74% respectively for 2018

Table 7 | Alert performance indicators by Hub

Hub	W3		Cumulative (2018)	
	# alerts	% verif.	# alerts	% verif.
Aweil	4	75%	10	50%
Bentiu	0	0%	0	0%
Bor	1	0%	4	25%
Juba	2	50%	7	43%
Kwajok	3	100%	7	100%
Malakal	3	0%	4	0%
Rumbek	5	20%	9	11%
Torit	2	0%	6	33%
Wau	4	0%	4	0%
Yambio	5	0%	11	
South Sudan	29	28%	62	34%

Table 8 Summary of key alert indicators

W3	Cumulative (2018)	
29	62	Total alerts raised
28%	34%	% verified
0%	0%	% auto-discarded
0%	0%	% risk assessed
0%	0%	% requiring a response

A total of 29 alerts were reported in week 3 [majority reported from Rumbek and Yambio hubs]. Only 28% of the alerts reported in week 3 were verified; 0 were risk assessed and 0 required a response.

Table 9 | Alert performance indicators by event

Event	W3		Cumulative (2018)	
	# alerts	% verif.	# alerts	% verif.
Indicator-based surveillance				
Malaria	4	50%	7	57%
AWD	8	25%	95	29%
Bloody Diarr.	9	11%	20	39%
Measles	4	50%	13	54%
Meningitis	0	0%	0	0%
Cholera	0	0%	0	0%
Yellow Fever	1	0%	1	0%
Guinea Worm	1	0%	2	0%
AFP	2	50%	35	50%
VHF	0	0%	0	0%
Neo. tetanus	0	0%	0	0%
Event-based surveillance				
EBS total	0	0%	3	33%

Table 10 | Event risk assessment

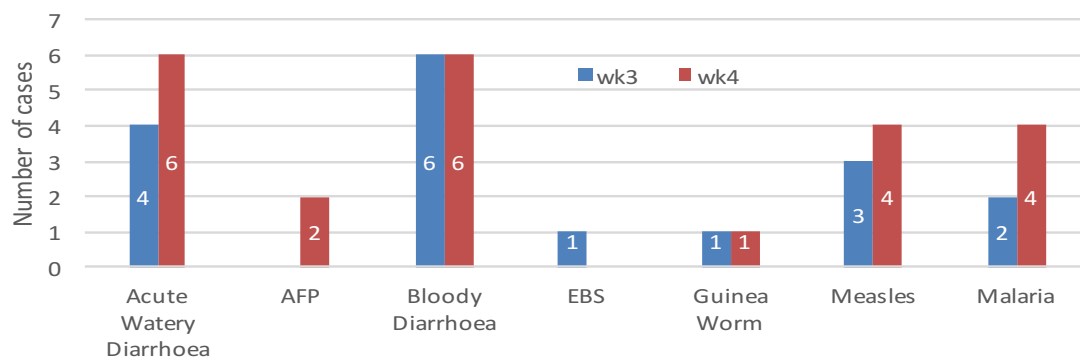
W3	Cumulative (2018)	
0	0	Low risk
0	0	Medium risk
0	0	High risk
0	0	Very high risk

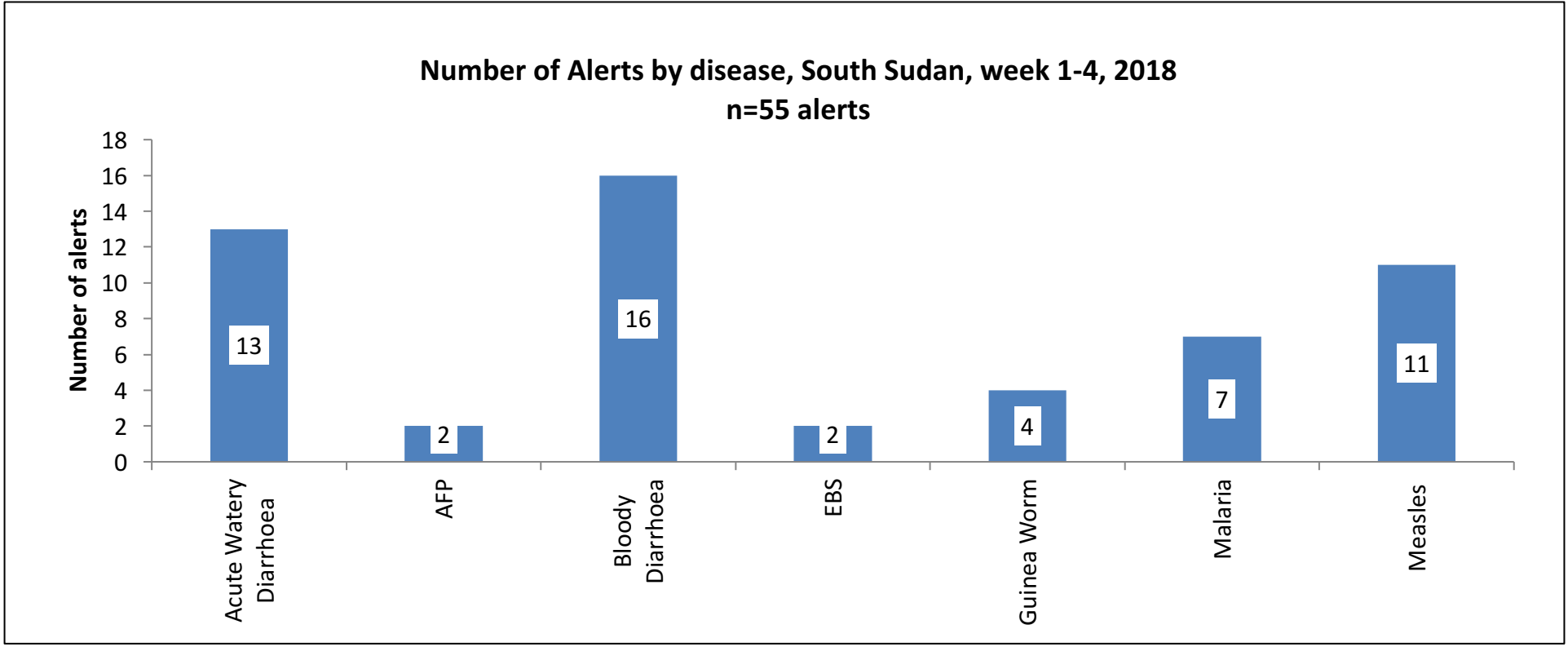
- During the week, acute bloody diarrhoea, suspect measles, and acute watery diarrhoea were the most frequent infectious hazards reported.

County	Acute Watery Diarrhoea	AFP	Bloody Diarrhoea	Guinea Worm	Measles	Malaria	Total Alerts
Aweil North	1		1			1	3
Cueibet					1		1
Duk	1						1
Ezo	1		1				2
Fashoda		1					1
Juba					1		1
Malakal			1				1
Renk			1				1
Tambura	1		1				2
Terekeka	1						1
Tonj North					1	1	2
Torit			1		1		2
Wau						1	1
Yambio						1	1
Yirol West				1			1
Aweil South	1						1
Twic		1					1
Total Alerts	6	2	6	1	4	4	23

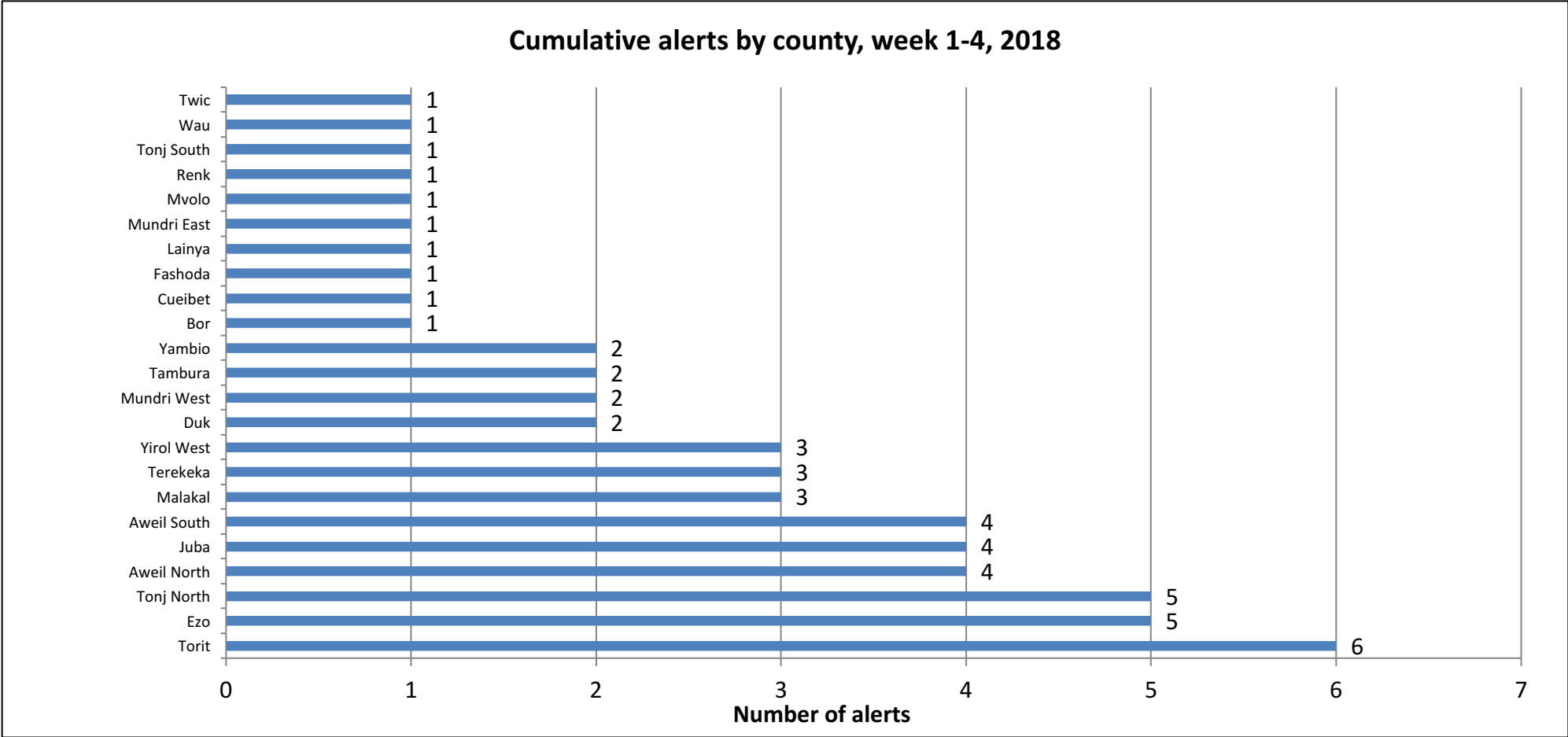
- During week 4, a total of 23 alerts triggered
- Bloody diarrhoea; acute watery diarrhoea; and suspect measles were the most frequent infectious hazards reported in the week.
- During the week, 10 suspect whooping cough cases were reported and treated from Nyang PHCC, Yirol East County. Follow up investigations underway
- Five AWD cases including one death in a child were reported in Gunyoro (12km from Torit). Four children were treated in Torit and ICRC conducted verification mission to Gunyoro on 19 Jan 2018. Two symptomatic AWD cases found but did not pass stool at the time of the investigation. Overall, the assessment showed there was no evidence of cholera in the area

Alerts by hazard in week 3 and week 4, 2018





- The Figure shows the cumulative number of alerts triggered in 2018 by hazard and location.
- Since the beginning of 2018, most alerts are due to Bloody diarrhoea, measles, and acute watery diarrhoea
- A special investigation into the bloody diarrhoea cases is planned (protocol and case form finalized).



- The Figures show the cumulative alerts triggered in 2018 by location
- Most alerts have been reported from Torit, Ezo, and Tonj North

County	OUTCOME	RISK_ASSESS	VERIFICATION	Total Alerts
Acute Watery Diarrhoea			13	13
AFP			2	2
Bloody Diarrhoea			16	16
EBS			2	2
Guinea Worm	1		3	4
Malaria			7	7
Measles		2	9	11
Total Alerts	1	2	52	55

- The Figures show the cumulative alerts by risk assessment state in 2018
- Of the 55 alerts reported in 2018; a total of 52 alerts are at verification stage; and the rest are at risk assessment stage (2 alerts); one at outcome stage.

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
New epidemics: no new epidemic								
Ongoing epidemics:								
RVF	Yirol East	28/12/2017	5	20 (0.014)	Yes	N/A	Yes	N/A
Measles	Cueibet	14/10/2017	0	20 (0.012)	Yes	Yes	Yes	N/A
Measles	Panyijiar	2/07/2016	0	324 (0.47)	Yes	Yes	Yes	N/A
Cholera	27 counties	18/06/2016	0	20,438 (0.49)	Yes	Yes	Yes	Yes

Epidemics - Update (RVF, Yirol East)

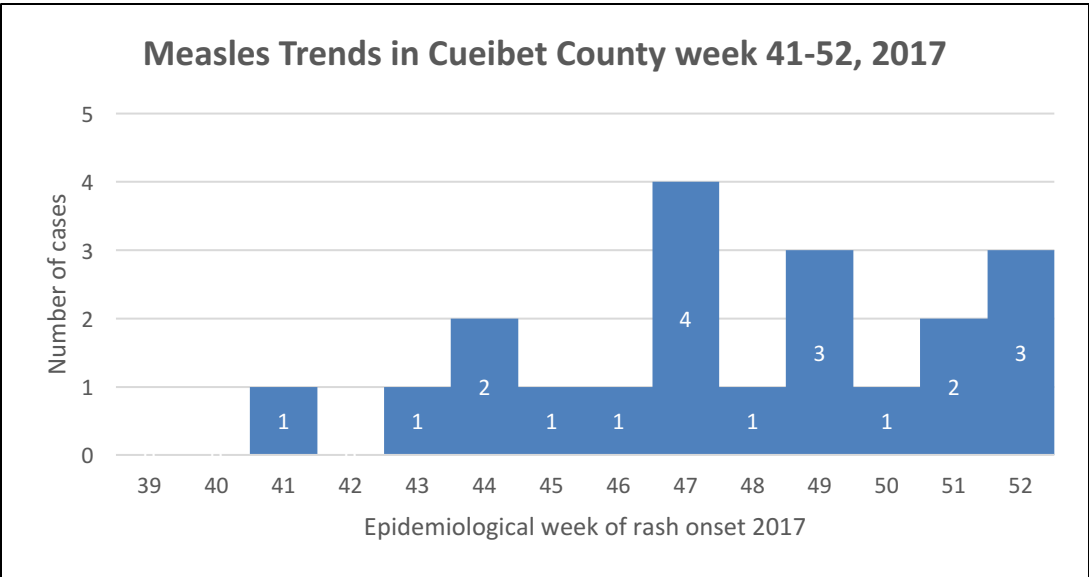
A Rift Valley Fever (RVF) outbreak reported in Thonabutkok village, Yali Payam, Yirol East county with the initial case dating back to 7 December 2017.

As of 28 January 2018, a total of **20 suspect RVF human cases** have been reported in Eastern Lakes State. Out of the 20 suspect human cases reported since 7 December 2017, **three human cases have been confirmed, three died** and were classified as **probable cases** with epidemiological linkage to the three confirmed cases, **four were classified as none-cases** following negative laboratory results for RVF, and **laboratory testing is pending** for the other **10 suspect cases**.

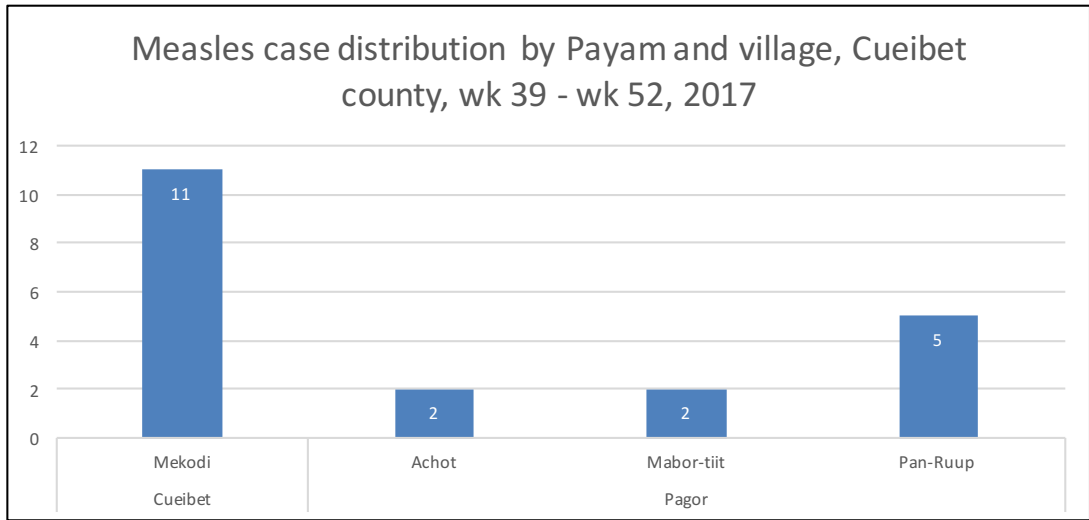
At the moment - field investigation (human, animal, entomological) are ongoing; supportive care to suspect cases; and social mobilisation and risk communication. Discussions on a joint Ministry of Health and Ministry of Livestock and Fisheries outbreak declaration are ongoing at the highest levels of Government.

Taskforce meetings are ongoing at national and sub-national levels; ToRs for the multisectoral taskforce have been drafted and the first draft of the RVF response plan has been circulated.

Ongoing epidemics - Epidemic description - Measles in Cueibet county

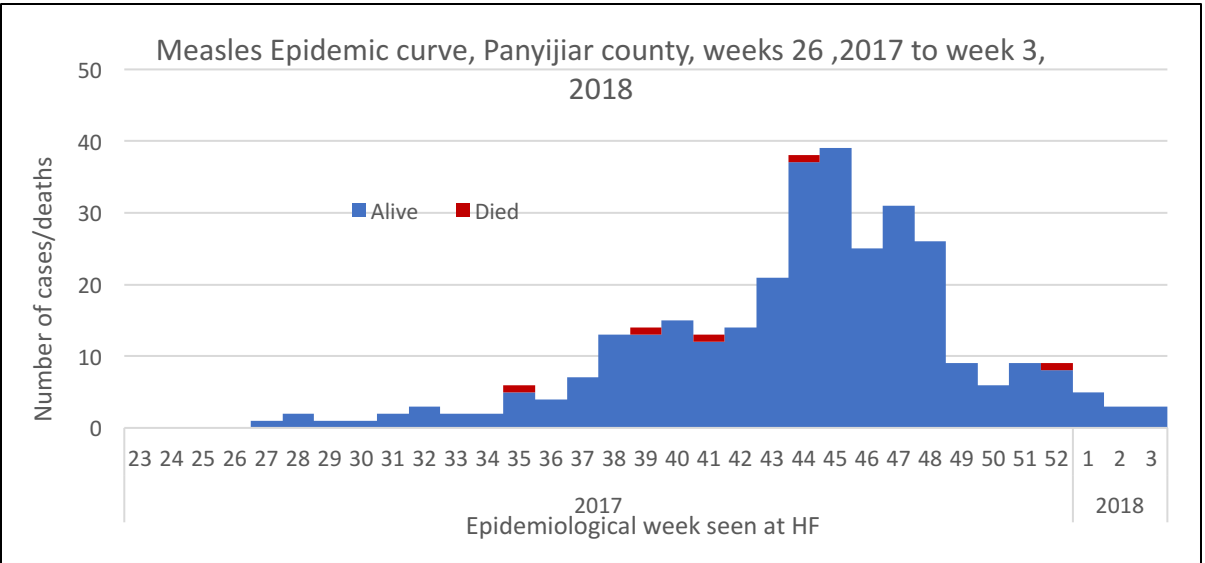


Age (years)	Female (n)	Male (n)	Total cases	Percentage	Cum.%
<1yr	1	3	4	20%	20%
1-4yrs	5	4	9	45%	65%
5-14yrs	2	3	5	25%	90%
15+yrs	2	0	2	10%	100%
Grand Total	10	10	20	100%	

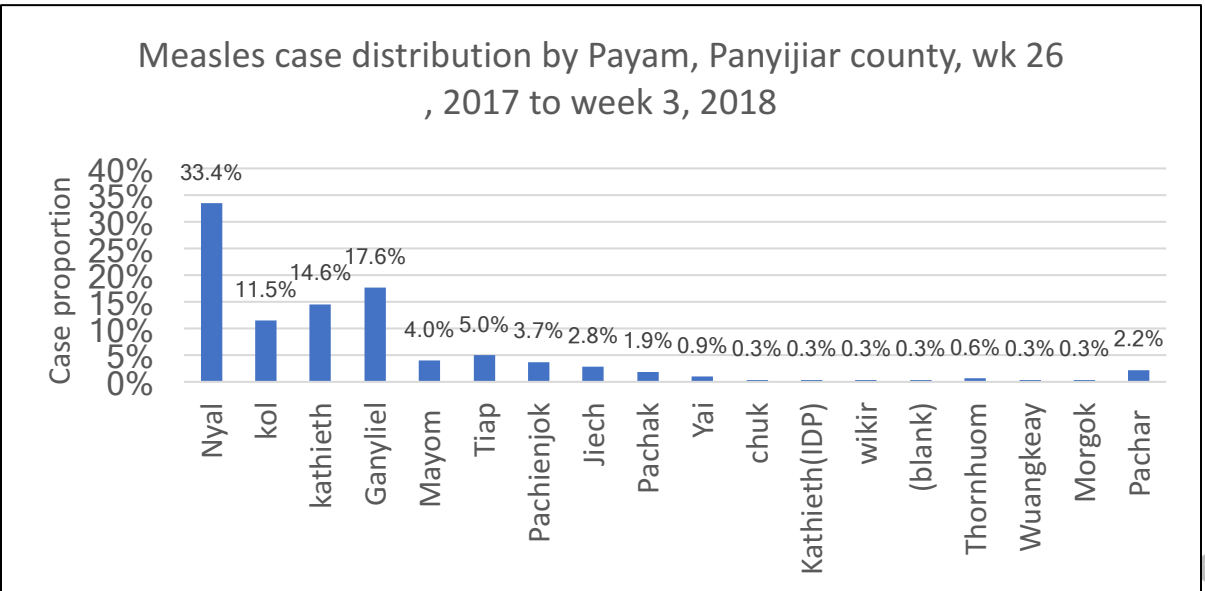


- Measles outbreak confirmed in week 50 of 2017 with 3 measles IgM cases
- At least 20 cases including one community death (CFR 5%) line listed since week 41 of 2017.
- Most cases reported from Pagor PHCU and Cueibet hospital
- 13 (65%) are <5 years of age
- Two payams affected - Cueibet and Pagor
- Most affected villages are Mekodi and Pan-ruup
- Reactive vaccination plans underway - CHD, HC, CUAAM, HPF
- A reactive campaign is underway from the week of 29 Jan 2018.

Ongoing epidemics - Epidemic description - Measles in Panyijiar county



Age (years)	Female (n)	Male (n)	Total cases	Percentage	Cum. %
<1yr	46	36	82	25.5%	25.5%
1-4yrs	89	81	170	53.0%	78.5%
5-14yrs	18	18	36	11.2%	89.7%
15+yrs	21	12	33	10.3%	100.0%
Total cases	174	147	321	100.0%	



- Transmission has declined in Panyijiar
- 3 cases reported in week 3 of 2018
- Four of the recent cases reported among IDPs from Mayendit
- Mop up vaccination ongoing in area with new cases - [new IDPs and area that were not vaccinated due to flooding]
- Three samples collected as part of the post campaign outbreak surveillance.

Ongoing epidemics - Epidemic description - Cholera in South Sudan

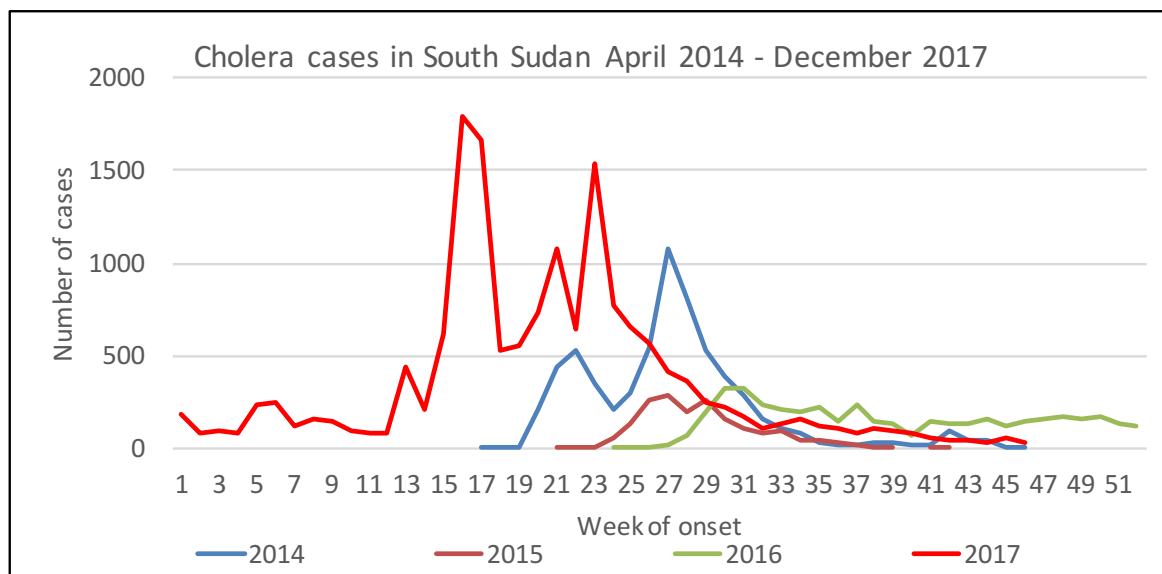


TABLE 2 | Cholera Outbreaks in South Sudan 2014-2017

Summary measure	2014	2015	2016/17
No. cases	6,421	1,818	20,438
No. deaths	167	47	436
CFR%	2.60%	2.59%	2.13%
No. counties affected	16	3	27
Duration (weeks)	29	19	(85) Ongoing
Outbreak start date	24/04/2016	18/05/2016	18/06/2016
Date of last case	13/11/2016	24/09/2016	Ongoing
Attack rate [per 10,000]	27	17	49.38

- No transmission in any of the 24 counties where cholera was confirmed in 2017
- Most recent cases reported in week 50 2017 in Juba and week 47 2017 in Budi
- Active AWD/cholera surveillance initiated to support end-of-cholera outbreak declaration especially in the Juba and other counties with AWD alerts
- Five AWD cases including one death reported in Gunyoro (12km from Torit). ICRC verification mission to the area on 19 Jan 2018 showed no evidence of a cholera outbreak
- The 2nd round of oral cholera vaccination completed in Budi

Date of report	Disease suspected	Number cases (deaths)	County	Payam	Status of investigations
6Jan18	measles	8(1)	Aweil Center	Nyalath; Hai Salam; Bar Mayen	Three cases investigated by ARC with one being confirmed as measles IgM positive on 19Jan18. RRT to collect five more samples for confirmatory testing.
2Jan18	Measles	12(0)	Torit	Kiyala payam, ogurony village	RRT investigated event on 4 Jan18. Of the five samples collected; two were measles IgM positive; one was rubella IgM positive. RRT to collect five more samples for confirmatory testing.
15Jan18	Pertussis	21(0)	Yirol East	Nyang	RRT investigations established all the affected were not vaccinated. Follow up mission underway to mobilize community for accelerated routine vaccination; line list and provide treatment for cases and their contacts
25Jan18	Rabies	28(2)	Rubkona	Bentiu PoC	At least 28 animal bite (suspect rabies) cases including 2 deaths reported by MSF since last month. There is need to mobilize human antirabies vaccine for post-exposure prophylaxis; consultations ongoing to find solution for stray dogs in the PoC.
14Jan18	cholera	5(01)	Torit	Gunyoro	Five AWD cases including one death reported in Gunyoro (12km from Torit). ICRC verification mission to the area on 19 Jan 2018 showed no evidence of a cholera outbreak

For more help and support, please contact:

Dr. Pinyi Nyimol Mawien
Director General Preventive Health Services
Ministry of Health
Republic of South Sudan
Telephone: +211 955 604 020

Dr. Mathew Tut Moses
Director Emergency Preparedness and Response
(EPR)
Ministry of Health
Republic of South Sudan
Telephone: +211 955 295 257

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>

