

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Epidemiological Update W02 2019 (Jan 07, 2018- Jan 13, 2019)



- The completeness for IDSR reporting at the county level was 57% in the second week of 2019 . The completeness for EWARS reporting from IDPs was 83%.
- Measles (6), malaria (4) and bloody diarrhea (4) were the most frequently reported infectious diseases in week 02, 2019.
- The confirmed measles outbreak in Abyei continues with a total of 115 cases being reported as at end of week 3, 2018. Of all the cases reported, 103 (9.6%) were reported between week 51, 2018 and week 3, 2019. Forty three (43) cases and 29 cases were reported in week 2, 2019 and week 3, 2019 respectively. No deaths has been reported. Measles has been present in the area throughout the year, with about one suspected case seen per week. A reactive vaccination campaign will be conducted in the week beginning on January, 21st 2019.
- A reactive vaccination campaign is ongoing in Rumbek East and its neighboring counties after it was launched on 16th January, 2019. No new measles cases have been reported from Rumbek East since week 51, 2018.
- There was no new suspected Rift Valley Fever (RVF) cases reported from Yirol East in week 02. 2019. A total of 58 suspected human cases including 6 confirmed; 3 probable; 48 non-cases; and 01 pending classifications (with no definitive lab. test results) have been reported. Nine confirmed animal cases (cattle).
- Four (4) new HEV cases reported from Bentiu PoC in week 02, 2019. A total of 159 HEV cases (18 confirmed by PCR) have been reported in Bentiu PoC in 2018. The new cases tested positive on RDT testing. Current response entails surveillance, case follow up in the communities and access to WASH services
- In light of the confirmed EVD outbreak in North Kivu, the South Sudan EVD contingency plan has been updated and implemented to mitigate the risk of EVD importation and enhance readiness capacities.

SURVEILLANCE PERFORMANCE

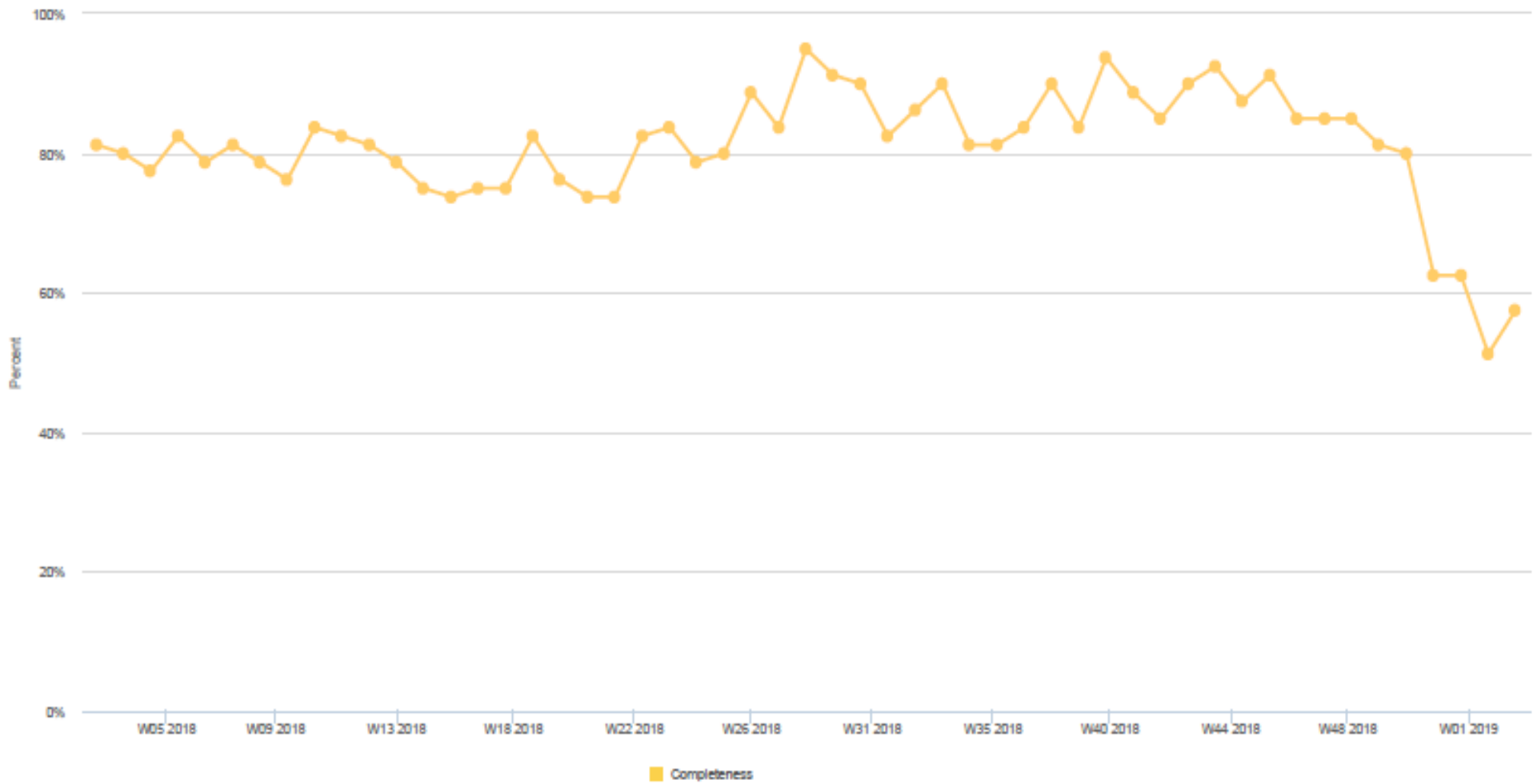
For the Integrated Disease Surveillance (IDSR) network and Early warning alert and response network (EWARN)

Table 1 | IDSR surveillance performance indicators by county (W2 2019)

Hub	Reporting		Performance (W2 2019)		Performance (Cumulative 2019)	
	# counties	# reports received	Completeness	Timeliness	Completeness	Timeliness
Aweil	5	5	100%	100%	67%	67%
Bentiu	9	5	56%	56%	37%	22%
Bor	11	3	27%	27%	15%	15%
Juba	6	3	50%	50%	33%	28%
Kwajok	7	3	43%	43%	29%	24%
Malakal	13	3	23%	23%	13%	10%
Rumbek	8	8	100%	100%	50%	50%
Torit	8	4	50%	50%	38%	38%
Wau	3	2	67%	67%	44%	44%
Yambio	10	10	100%	100%	67%	67%
South Sudan	80	46	57%	57%	36%	57%

- Completeness for IDSR reporting at the county level was 57% in week 2, 2019 and cumulatively at 36% for 2019.
- Timeliness for IDSR reporting at the county level was 5% in week 2 and cumulatively at 57% for 2019.

Figure 1 | Trend in IDSR completeness over time¹

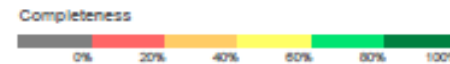
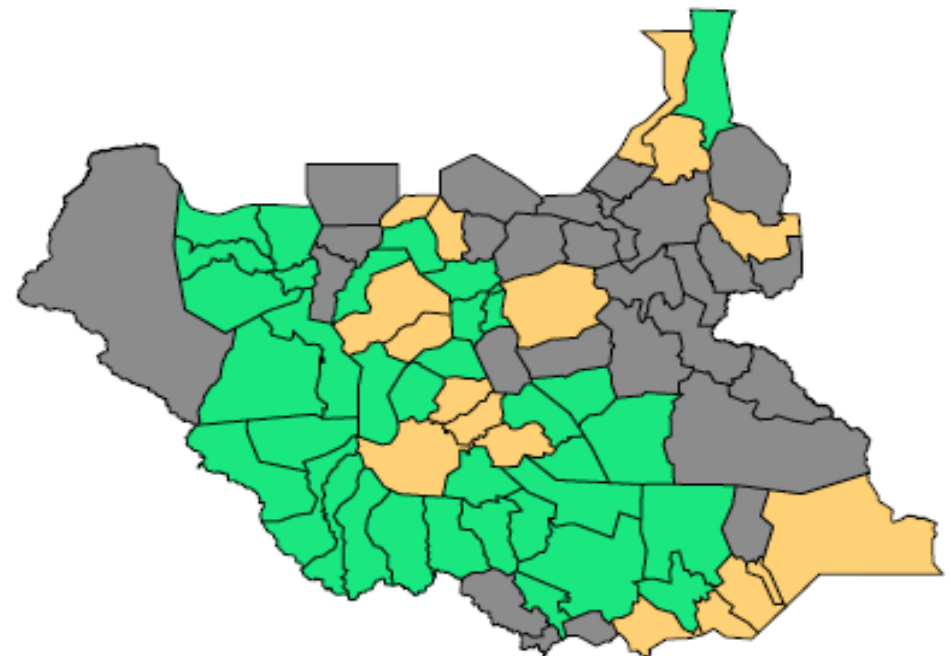
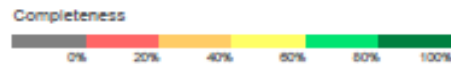
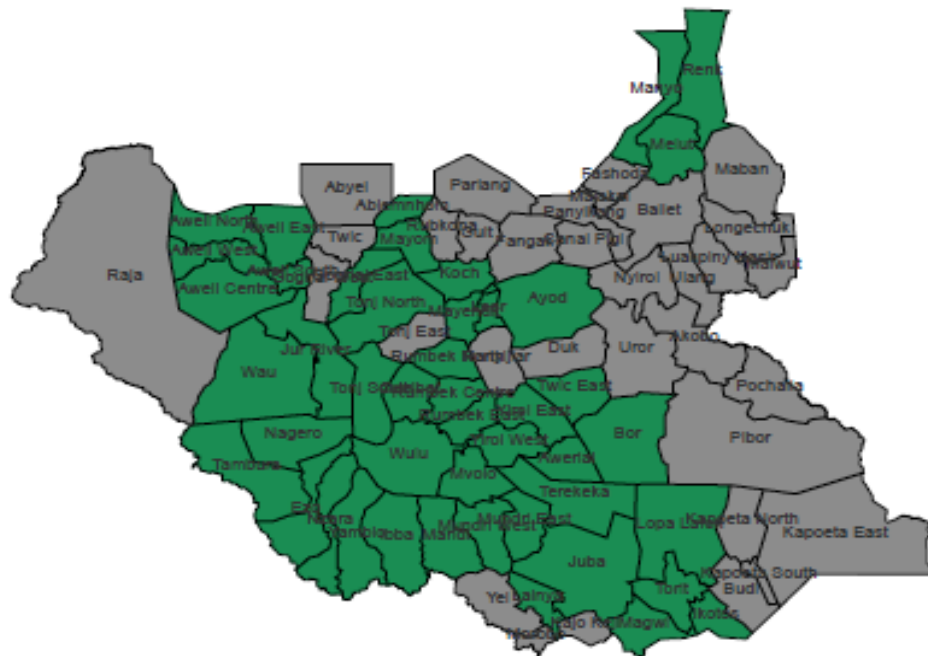


¹ Completeness footnote (to be drafted)

The graph shows completeness for the weekly IDSR reporting at the county level. An improvement is noted in comparison to week 01, 2019.

Map 1a | Map of IDSR completeness by county (W2 2019)

Map 1b | Map of IDSR completeness by county (2019)



- Counties that submitted their IDSR reports in week 02, 2019 are shown in green in map 1a.
- Counties that did not submit their IDSR reports in week 02, 2019 are shown in grey in map 1a. Notably, the number of counties in grey zone has been increasing over the last few weeks.

Table 4 | EWARS surveillance performance indicators by partner (W2 2019)

Partner	Performance		Reporting (W2 2019)		Reporting (Cumulative 2019)	
	# sites	# reports received	Completeness	Timeliness	Completeness	Timeliness
CMD	3	3	100%	100%	9%	9%
GOAL	2	2	100%	100%	67%	67%
HLSS	2	1	50%	50%	33%	33%
IMA	7	7	100%	100%	62%	62%
IMC	6	4	67%	67%	50%	50%
IOM	9	9	100%	100%	67%	67%
IRC	1	1	100%	100%	67%	67%
Medair	2	2	100%	100%	67%	67%
MSF-E	2	1	50%	50%	17%	17%
MSF-H	3	1	33%	33%	22%	22%
SMC	6	3	50%	50%	39%	39%
UNIDO	3	1	33%	33%	22%	22%
UNKEA	2	2	100%	100%	67%	33%
World Relief	1	1	100%	100%	67%	67%
TRI-SS	7	7	100%	100%	33%	33%
LIVEWELL	4	4	100%	100%	67%	67%
Total	63	52	83%	83%	39%	38%

Timeliness and completeness for EWARS/IDP reporting stands at 83% for week 02, while the cumulative completeness and timeliness are 39% and 38% respectively for 2019.

EVENT-BASED SURVEILLANCE

Alert management including detection;
reporting; verification; risk assessment; & risk
characterization

Table 7 | Alert performance indicators by Hub

Hub	W2		Cumulative (2019)	
	# alerts	% verif.	# alerts	% verif.
Aweil	0	0%	1	100%
Bentiu	0	0%	3	100%
Bor	0	0%	0	0%
Juba	1	100%	2	100%
Kwajok	0	0%	0	0%
Malakal	4	100%	4	100%
Rumbek	5	100%	7	100%
Torit	1	100%	1	100%
Wau	3	67%	4	75%
Yambio	4	100%	8	100%
South Sudan	18	94%	30	97%

Table 8 Summary of key alert indicators

W2	Cumulative (2019)	
18	30	Total alerts raised
94%	97%	% verified
0%	0%	% auto-discarded
0%	0%	% risk assessed
0%	0%	% requiring a response

Out of 18 alerts that were received in week 02, 94% were verified and 0% were risk assessed. None of the alerts required a response.

Table 9 | Alert performance indicators by event

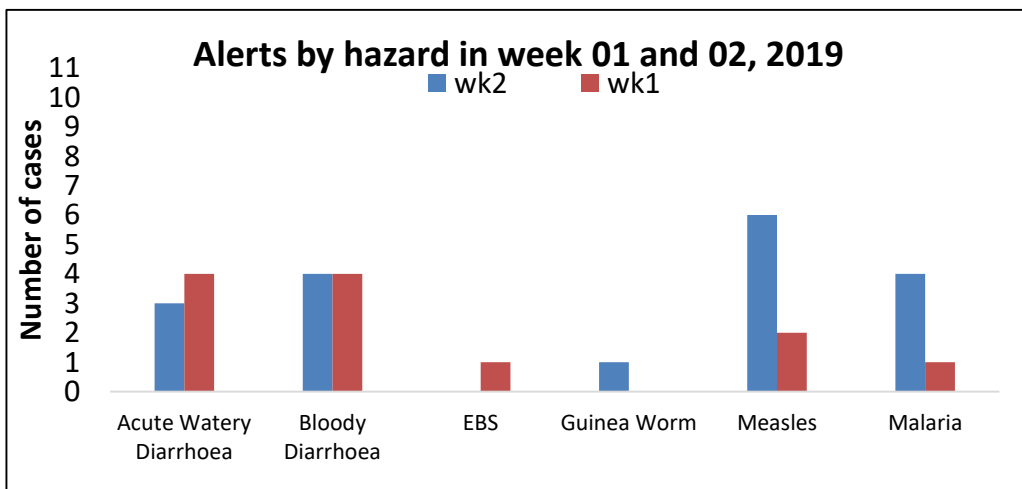
Event	W2		Cumulative (2019)	
	# alerts	% verif.	# alerts	% verif.
Indicator-based surveillance				
Malaria	4	75%	5	80%
AWD	3	100%	236	100%
Bloody Diarr.	4	100%	8	62%
Measles	5	100%	8	100%
Meningitis	0	0%	0	0%
Cholera	0	0%	0	0%
Yellow Fever	0	0%	0	0%
Guinea Worm	1	100%	1	100%
AFP	0	0%	54	0%
VHF	0	0%	0	0%
Neo. tetanus	0	0%	0	0%
Event-based surveillance				
EBS total	1	100%	1	100%

Table 10 | Event risk assessment

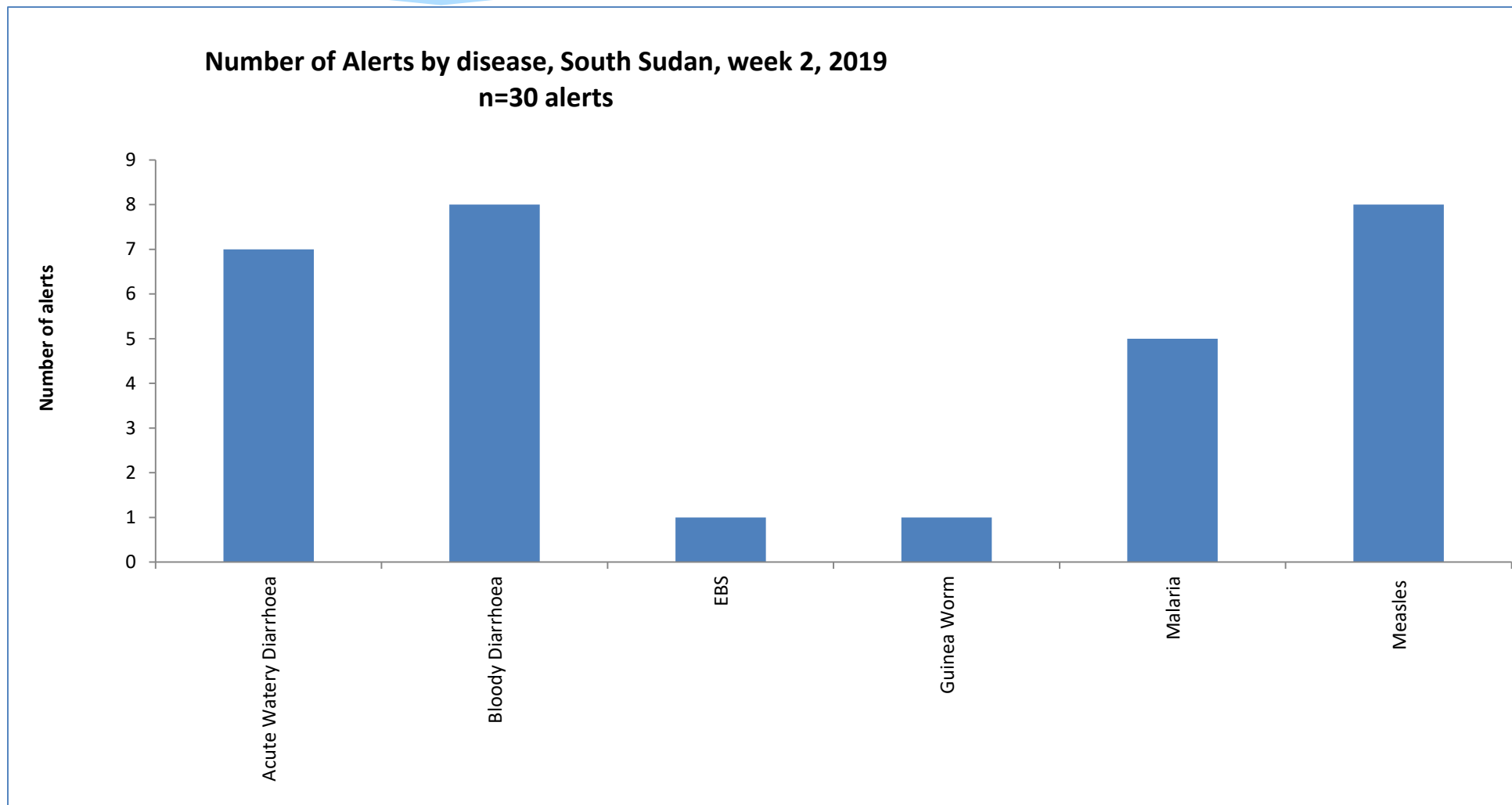
W2	Cumulative (2019)	
0	0	Low risk
0	0	Medium risk
0	0	High risk
0	0	Very high risk

In the second week of 2019, Measles (5), malaria (4) and bloody diarrhea (4) were the most frequently reported infectious diseases. One (1) alert was reported through the event-based surveillance.

County	Acute Watery Diarrhoea	Bloody Diarrhoea	Guinea Worm	Measles	Malaria	Total Alerts
Cueibet				1		1
Juba				1		1
Rumbek Centre				1		1
Rumbek North	1	1	1			3
Wau		1				1
Yirol East				1		1
Medair Wonhow Clinic					1	1
IMC UNMISS PoC Clinic	1					1
IOM Farajala PHCU					1	1
Malakal PoC Hospital MSF SP				1		1
GOAL Dethoma Camp 2		1			1	2
Duma PHCU	1	1		1	1	4
Total Alerts	3	4	1	6	4	18



- In week 02, 2019, 18 alerts were reported through EWARS.
 - Measles, malaria and bloody diarrhea were the commonly reported causes of alerts.
- An increased number of **chicken pox cases** have been reported in Munri West. About 66 cases have been reported since November, 2018.
- One (1) suspected case of **measles** and one (1) suspected **meningitis case** have been reported from Munri. Samples have been collected and await transportation to Juba for testing.
- A **suspected outbreak of acute watery diarrhea** has been reported in Tambura. The number of AWD cases started going up in 2018 and the total is estimated to be several hundreds. Most of the cases are children below 5 years. Some deaths have been reported as well. An investigation is ongoing.
- Suspected Rabies in Nzara:** 30 cases of dog bites since August 2018.



The Figure shows the cumulative number of alerts triggered in 2019 by hazard.

Cumulative alerts by risk assessment stage in 2019

County	RISK ASSESSED	VERIFICATION	Total Alerts
Acute Watery Diarrhoea	1	6	7
Bloody Diarrhoea	1	7	8
EBS		1	1
Guinea Worm		1	1
Measles		8	8
Malaria		5	5
Total Alerts	2	28	30

- The Figure shows the cumulative alerts by risk assessment state in 2019
- Of the 30 alerts reported in 2019; 28 alerts were verified and two (2) underwent risk assessment..

OUTBREAKS IN 2019

Major suspect and confirmed outbreaks in
South Sudan in 2019

Confirmed Outbreaks South Sudan – January 2019

- The map show outbreaks confirmed in 2018
- The active outbreaks include: Guinea worm (Rumbek Center and Rumbek North); Rift Valley Fever (Yirol East); HEV (Bentiu PoC); possible malaria upsurge in 8 counties; measles in Bor PoC; Measles in Rumbek East; Yellow Fever in Nzara; Measles in Abyei and Rubella in Malakal PoC.

Outbreak diseases

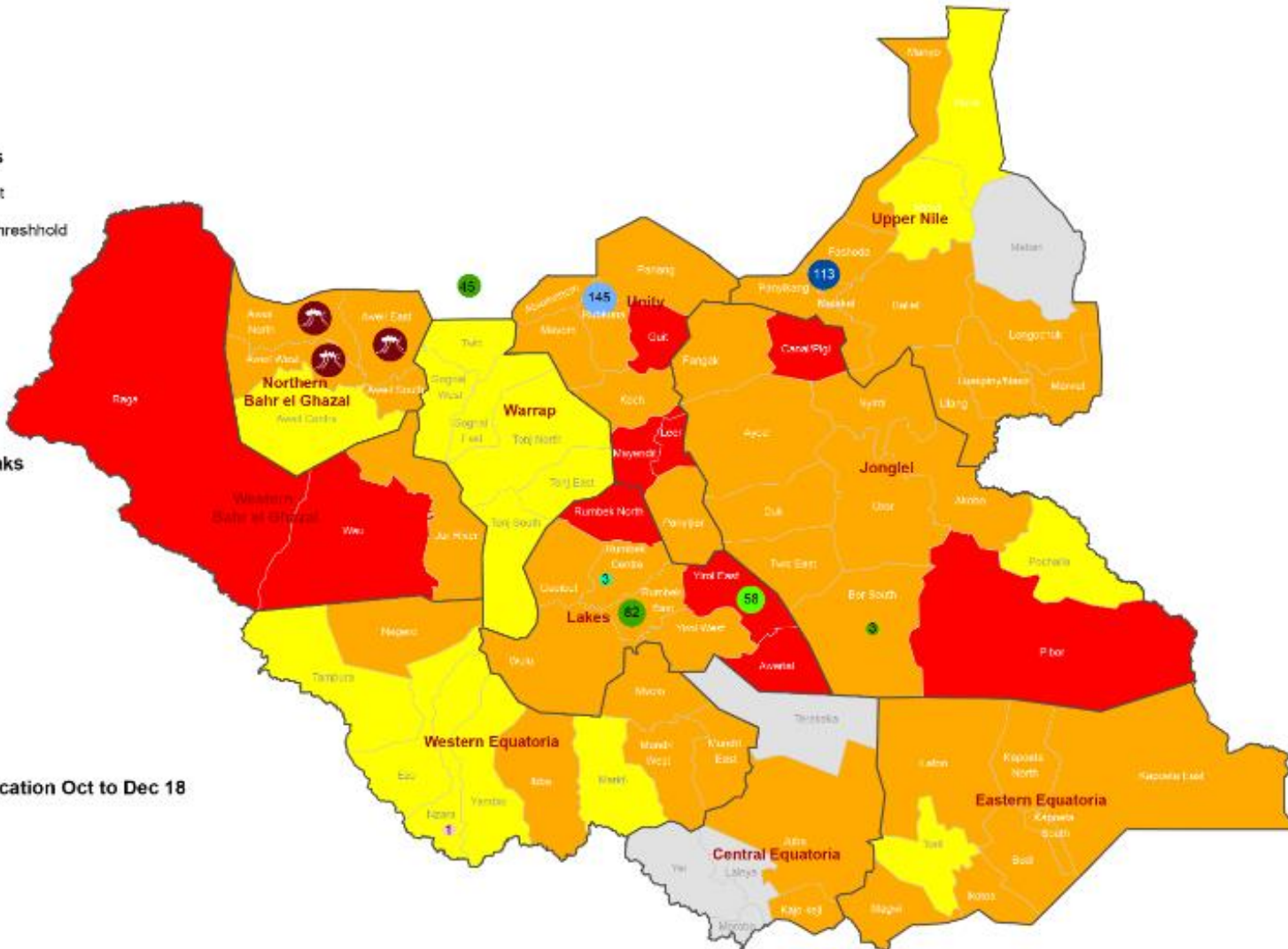
- RRT Deployment
- Malaria -above threshold
- Yellow Fever
- Measles
- Rubella
- Guinea Worm
- Rift valley fever

Number of outbreaks

- 1 - 5
- 6 - 10
- 11 - 50
- 51 - 100
- 101 - 200
- 201 - 300
- 301 - 400
- 401 - 500

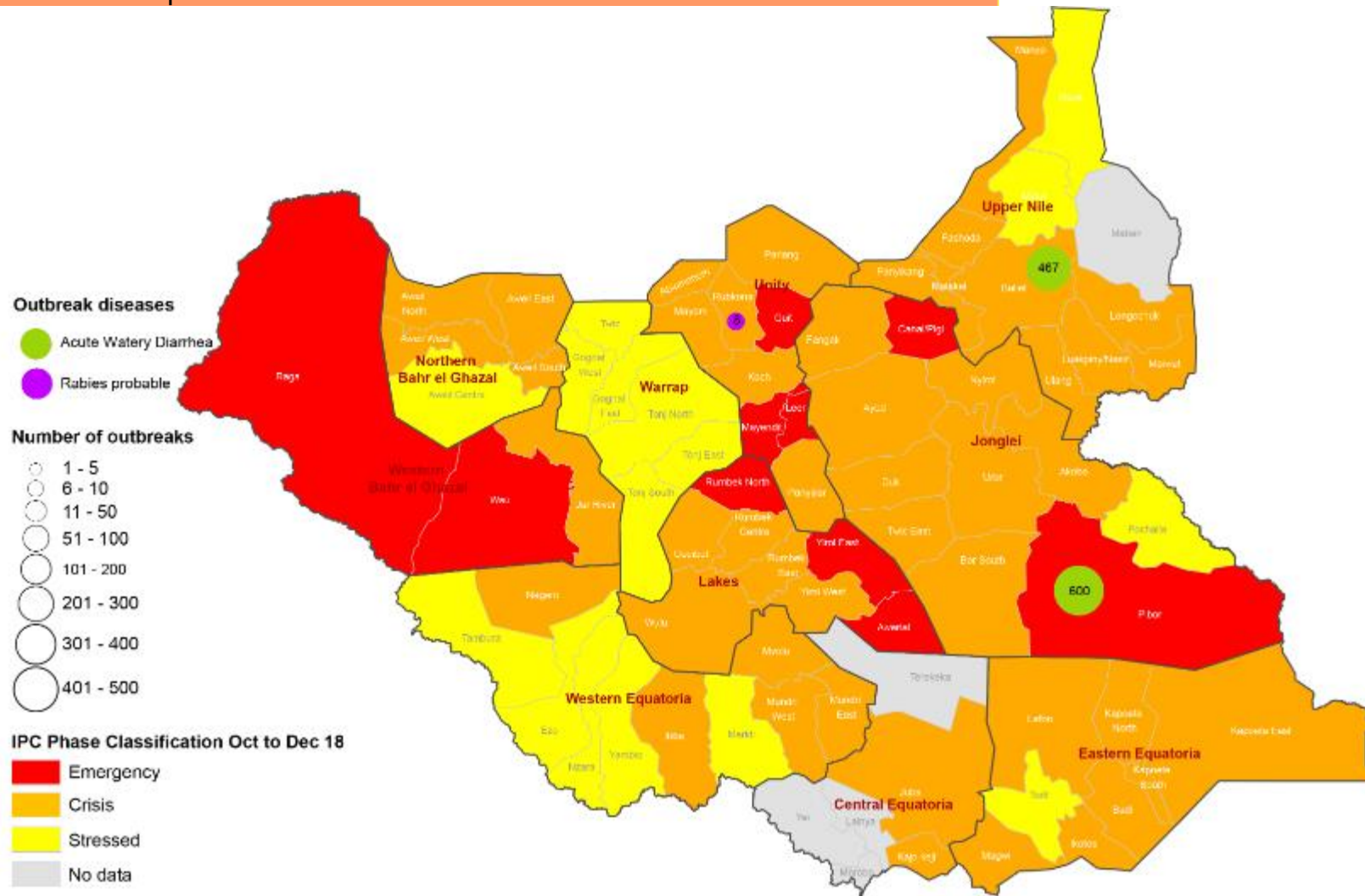
IPC Phase Classification Oct to Dec 18

- Emergency
- Crisis
- Stressed
- No data



Suspect Outbreaks South Sudan – 13th January 2019

- Map shows suspect outbreaks reported in 2018
- New alerts in the week
 - Acute watery Diarrhea in Malakal
 - Suspected rabies outbreak in Bentiu PoC
 - AWD in Tambura
 - Suspected rabies in Nzara



Aetiological agent	Location (county)	Date first reported	New cases since last bulletin	Cumulative cases to date (attack rate %)	Interventions			
					Case management	Vaccination	Health promotion	WASH
Ongoing epidemics								
Rubella	Malakal PoC	25/10/2018	20	113 (0.09)	Yes	No	Yes	N/A
Yellow Fever	Nzara	23/11/2018	0	1 (0.001)	Yes	No	Yes	N/A
Measles	Rumbek East	09/10/2018	0	82 (0.002)	Yes	No	Yes	N/A
Measles	Bor PoC	20/10/2018	0	3 (0.15)	Yes	No	Yes	N/A
Guinea worm	Rumbek Center & Rumbek North	27/05/2018	0	3 (0.001)	Yes	N/A	Yes	Yes
RVF	Yirol East	28/12/2017	0	58 (0.054)	Yes	N/A	Yes	N/A
Hepatitis E	Bentiu PoC	03/01/2018	4	159 (0.123)	Yes	No	Yes	Yes
Possible malaria upsurge	2 counties	01/07/2018			Yes	N/A	Yes	N/A
Measles	Abyei	12/02/2018	56	99 (0.06)	Yes	No	Yes	N/A

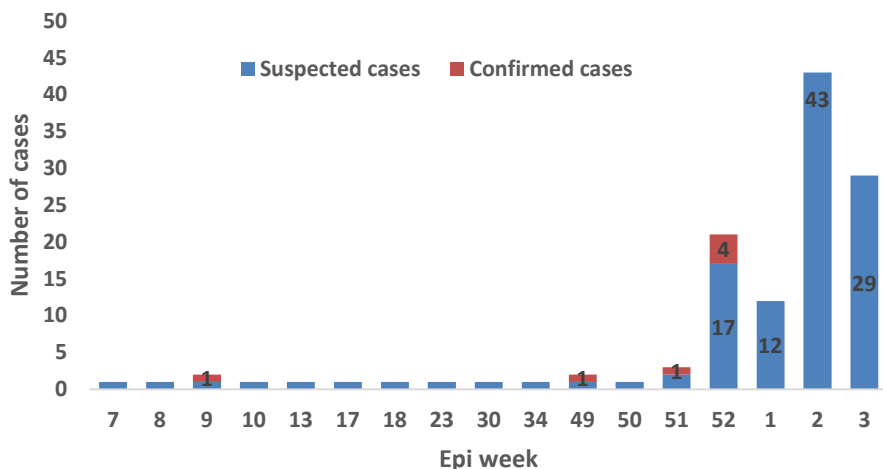
- Ongoing outbreaks in week 01, 2019**
1. Rubella Malakal PoC
 2. Yellow Fever in Nzara county
 3. Measles in Rumbek East county
 4. Measles in Bor PoC
 5. Guinea worm (Rumbek Center and Rumbek North);
 6. Rift Valley Fever (Yirol East);
 7. Hepatitis E Virus (Bentiu PoC);
 8. Possible malaria upsurge in 8 counties
 9. Measles in Abyei

ACTIVE OUTBREAKS AND PUBLIC HEALTH EVENTS

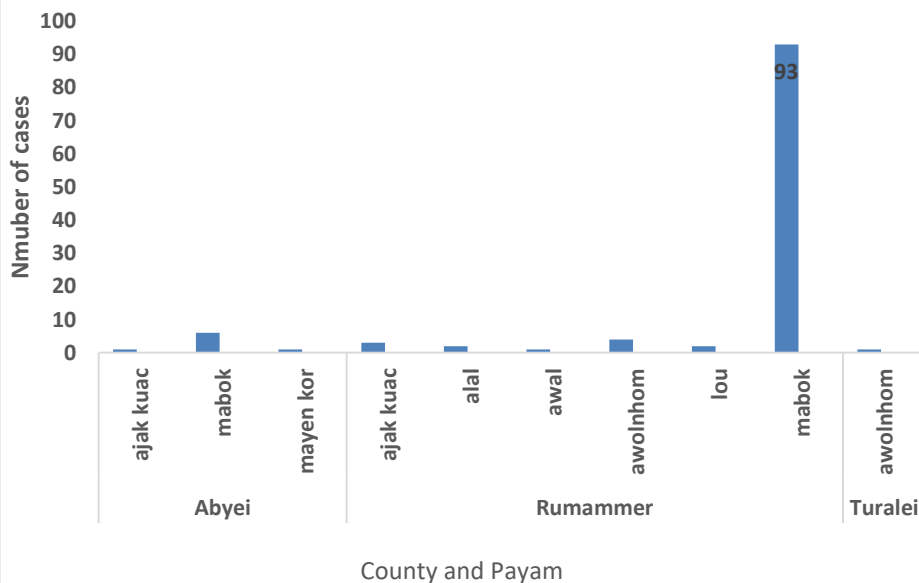
Brief epidemiological description and public health response for active outbreaks and public health events

Confirmed Measles outbreak – Abyei

Measles cases reported at Agok Hospital, week 7, 2018 - 03, 2019



Measles cases in Abyei, week 7, 2018 to week 3, 2019



Age groups	Female	Male	Total	Percentage, %	Cumulative %
<1		18	21	39	34.2
1-4		4	6	10	8.8
5-9		14	22	36	31.6
10-14		11	16	27	23.7
15+		1	1	2	1.8
Total cases		48	66	114	100.0

Background

- Measles has been present in the area throughout the year, with about one suspected seen per week

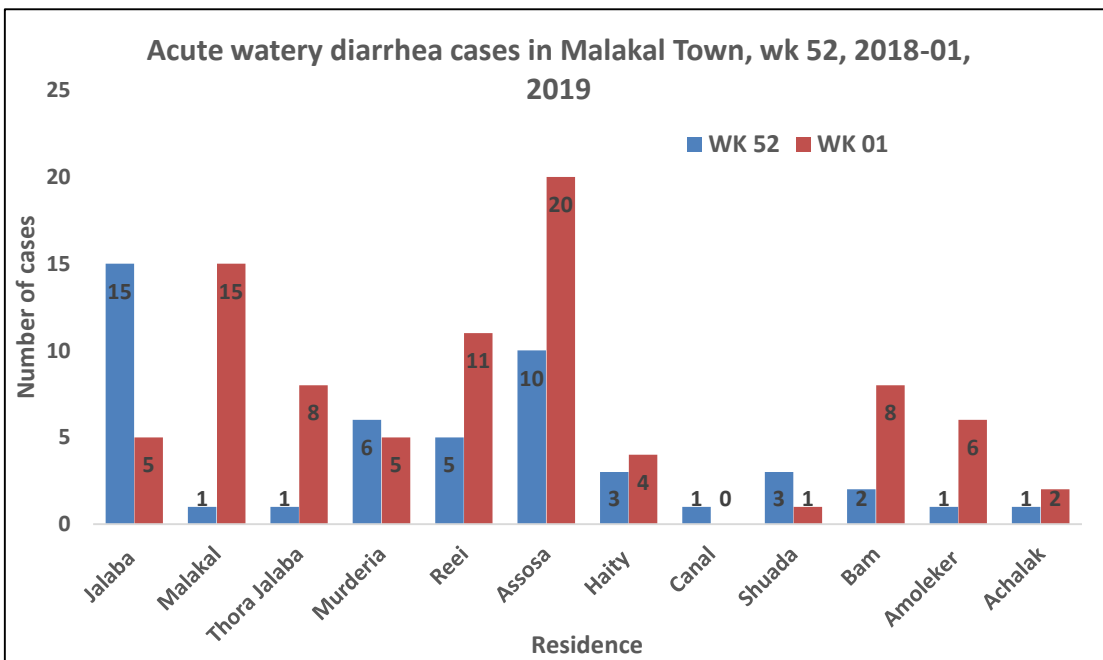
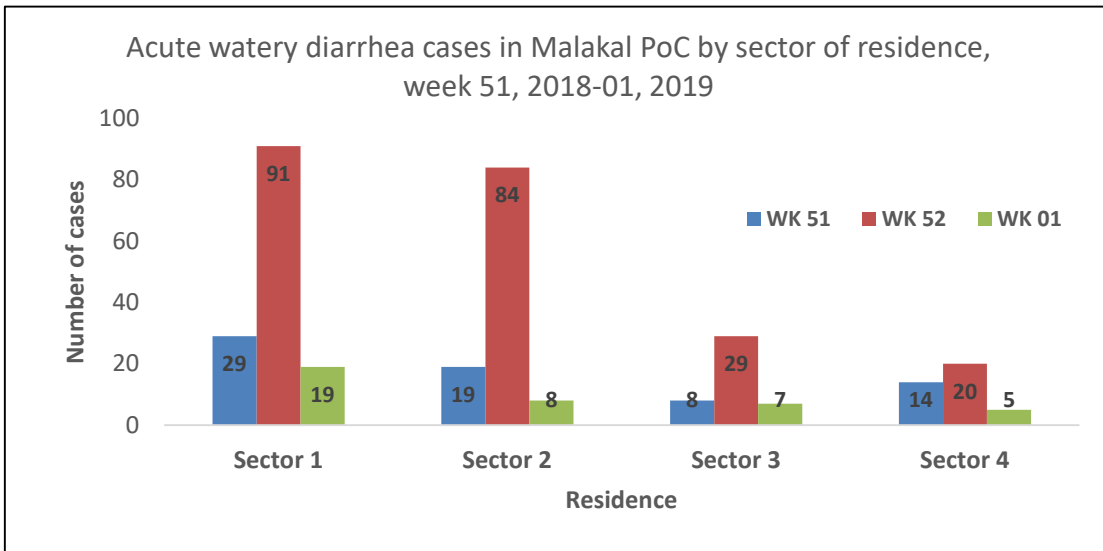
Descriptive Epidemiology

- A total of 115 suspected cases reported between week 7, 2018 and week 03,2019. Of all the cases, 103 (89.6%) were reported between week 51, 2018-03, 2019
 - Five (5) confirmed cases between week 51-52, 2018
- No deaths reported
- 49 (43%) cases are children <5 years; males are more than female, 66 (57.9%)
- Rumammer county had most cases with Mabok Payam having the most cases, 93 (80.9%)

Recommended response

- Reactive measles vaccination microplan targeting 16,000 children 6-59 months has been finalised
- Training of vaccinators to start on the 22 Jan 2019
- The vaccination campaign is scheduled to start 23 Jan 2019
- MMT to deploy on 22 Jan 2019
- WHO Kuajok team deployed on 21 Jan 2019
- UNICEF to deliver vaccines and immunisation supplies on 22 Jan 2019

Suspected AWD Outbreak- Malakal



Descriptive Epidemiology

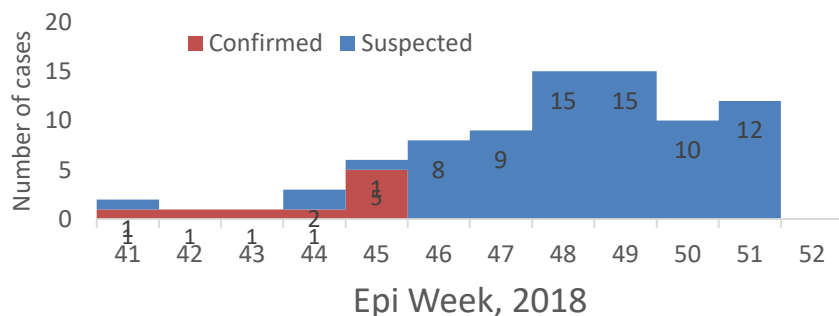
- An increase in AWD cases in Malakal PoC and Malakal Town reported from week 51, 2018
- Overall, 467 AWD cases to date
- In Malakal PoC, a total of 333 cases (70 in week 51, 224 in week 52 and 39 in week 01)
- In Malakal Town, 134 cases (49 in week 52 and 85 in week 01)
- Assosa, Jalaba and Malakal Payams had the most number of cases
- Majority of the cases are <5 children
- No mortalities reported

Recommended Responses

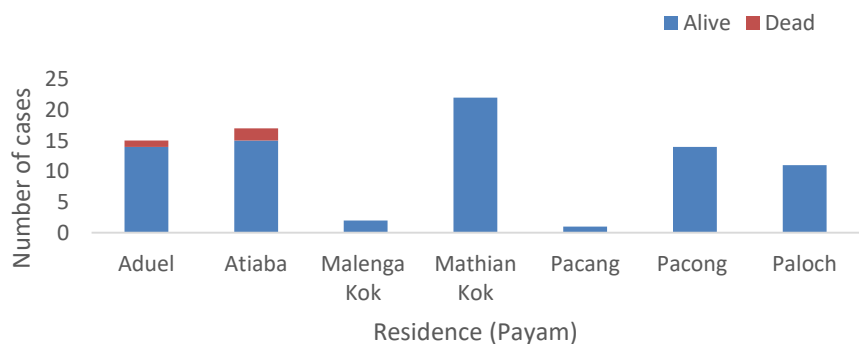
- Samples have been collected for testing for cholera and other differentials
- Results are pending
- Continue case management and line listing
- Engaging WASH partners to fill in the gaps in WASH services and increase awareness about the underlying cause of the outbreak

Confirmed Measles outbreak – Rumbek East

Measles cases by status in Rumbek East, Week 41-52, 2018



Measles cases by Payam in Rumbek East, Week 41-52, 2018



Age groups	Male	Female	Total	Percentage, %	Cumulative %
<1		5	5	6.1	6.1
1-4	25	25	50	61.0	67.1
5-9	8	7	15	18.3	85.4
10-14	2	3	5	6.1	91.5
15+	4	3	7	8.5	100.0
Total cases	39	43	82	100.0	

Background

- Suspect measles cases reported from Mabor Duang village, Aduel payam in Rumbek East where the initial suspect case was a 38 year female whose illness started on 12 October 2018 in week 41.
- The affected village is served by Mabor Duang PHCC

Descriptive Epidemiology

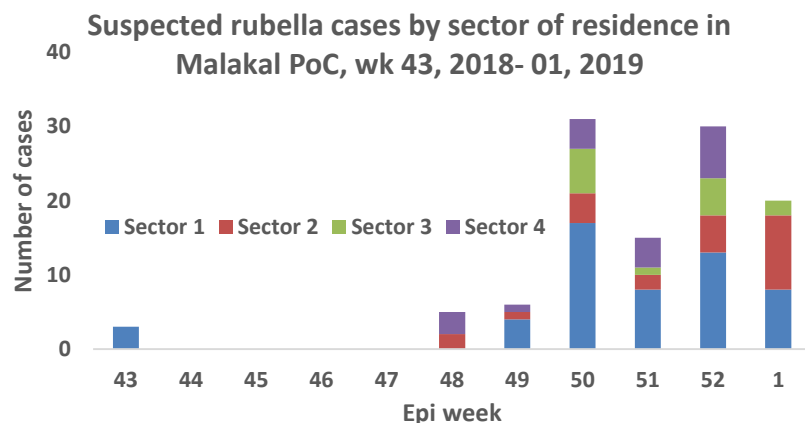
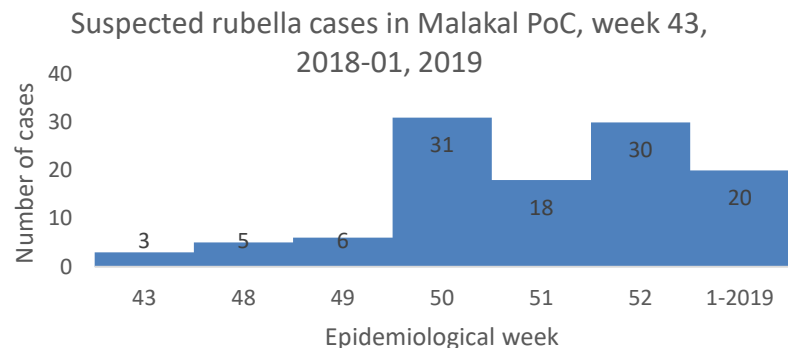
- 82 cases including 9 confirmed cases and 3 death (CFR 3.6%) reported
- Cases reported from six payams with most originating from Aduel; Atiaba, and Mathian kok.
- Majority of the cases, 55 (67%), were children < 5 years of age
- A total of 9 samples tested positive for measles IgM on 22 November 2018

Recommended response

1. Reactive campaign is ongoing. The campaign targets to vaccinate 51,653 children 6-59 months from 8 payams in Rumbek East; one payam in Wulu; and three payams in Yirol West.
2. Surveillance through active case search and line listing and community sensitisation on routine immunization

No new cases reported since week 51

Confirmed Rubella outbreak – Malakal PoC



Age Groups	Female, n(%)	Male, n(%)	Total, n(%)
<5	32 (28.6)	46 (41.1)	78 (69.6)
5-9	19 (17.0)	10 (8.9)	29 (25.9)
10-14	2 (1.8)	3 (2.7)	5 (4.5)
15+	0 (0.0)	0 (0.0)	0 (0.0)
Total	53 (47.3)	59 (52.7)	112 (100.0)

Background

- Suspect measles cases reported from Sector 1; Block 1 of Malakal PoC starting 27 Oct 2018. The initial three samples were IgM negative for measles and rubella.

Descriptive Epidemiology

- A total of 113 suspected rubella cases have been reported since week 43
- No deaths reported
- More males, 59 (52.7%) than females affected.
- There no cases reported among females within reproductive age groups (15-49 years)
 - Rubella infection in pregnancy associated with congenital rubella syndrome,
 - The outbreak started in sector 1 which remains the most affected sector
- 41 cases are laboratory confirmed

Recommended response

- Continue line listing and analyzing the epidemiology to describe the high-risk groups
 - Women of reproductive age group, 15-49 years
- Provide supportive symptomatic care to new cases
- Sensitize the communities to enhance routine immunization.

Yellow Fever Update: Sakure Payam, Nzara county, Gbudue state

Epidemiological update

- As of 19 Dec 2018, only one (1) PCR confirmed Yellow Fever case in the country
- Out of 35 samples collected by investigation team during active case search and contact tracing, two (2) samples tested presumptively yellow fever IgM positive

Entomological update

- Overall, the entomological assessments in Sakure, Nzara, and Yambio towns showed no evidence of *Aedes species* mosquitoes and the stegomyia entomological outbreak indices for the three towns were all below the WHO epidemic thresholds. This is attributed to the current dry season and hence the greatly reduced breeding and mosquito populations at this time of the year.

Laboratory update

- Out of the 36 samples tested;
 - One (1) sample was PCR confirmed for yellow fever virus.
 - Two (2) samples were presumptively yellow fever IgM positive (PRNT underway)
 - Conclusive testing underway for the remaining 33 samples (presumptively negative or inconclusive on preliminary serological testing).
- The yellow fever PCR positive case and the two presumptive yellow fever IgM positive cases all originate from Sakure payam in Nzara Payam, Gbudue state

Recommendations and Ongoing Activities

- Surveillance and laboratory investigation of new suspect cases
- Conclusive testing of presumptive yellow fever IgM positive cases awaited-expected on 18th January 2018
- The decision on conducting a rapid risk assessment will be based on additional information indicating active transmission
- Development of a draft yellow fever vaccination microplan for Sakure Payam-ongoing

Ebola alerts investigated from May 2018 to date

Date	Cases	Deaths	Payam	County	eRDT	eGeneXpert	ePCR	Comments
28May	1	0	Makpandu	Yambio	ND	ND	-ve	Reported in refugee camp
8Sep	1	1	Bakiwiri	Yambio	ND	ND	-ve	Did not meet case definition
26Sep	1	1	N/Bari	Juba	ND	ND	-ve	Community death
3Oct	1	1	Yei town	Yei	ND	ND	ND	Never traced (?false alert)
12Oct	1	0	Rumbek	Rumbek Center	ND	-ve	-ve	Recent travel from DR Congo
14Oct	1	0	Gumbo	Juba	ND	-ve	-ve	Did not meet case definition
18Oct	1	1	Mundri East	Mundri East		ND	-ve	Reported by Lui hospital
21Oct	1	1	Yambio	Yambio	ND	ND	-ve	Recovered & discharged
29Oct	2	0	Nimule	Pageri	ND	ND	ND	Alerts discarded
11Nov	1	1	Loka	Lainya	ND	-ve	-ve	Investigated 11 Nov
23 Nov	1	0	Sakure	Nzara	ND	-ve	-ve	Confirmed for Yellow Fever
29 Nov	1	1	Yambio	Yambio	ND	-ve	-ve	Investigated on 29 Nov
03 Dec	1	0	Renk South	Renk	ND	-ve	-ve	Investigated 4 Dec
15 Dec	1	0	Rejaf	Rejaf	ND	-ve	-ve	Investigated 15 Dec
25 Dec	1	0	Yambio Town		ND	-ve	-ve	Investigated 25 Dec

- The latest EVD suspect case that was reported from Yambio Town on 25th Dec has been confirmed negative for Ebola Zaire and other viral hemorrhagic fevers on PCR testing in UVRI, Entebbe, Uganda .
- A total of 19 Ebola alerts have been investigated since May 2018
- Samples obtained from 13 Ebolavirus alerts; 13 samples tested negative for Ebolavirus and 1 sample tested positive for Yellow Fever on PCR.

Malaria trends

Current malaria trends

Malaria was the leading cause of morbidity accounting for 50.3% of all cases in week 02, 2019. The trend analyses showed at least 8 counties in four state hubs having malaria trends that are significantly higher than expected. Counties with malaria trends that exceeded the threshold (third quartile of trends for the period 2013-2017) include:

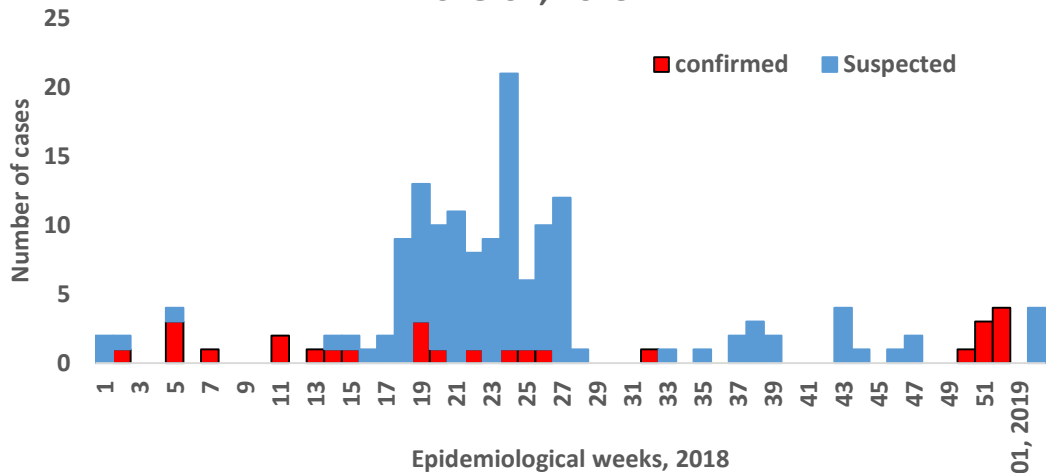
1. **Aweil hub** (Aweil West, Aweil East and Aweil North)
2. **Juba hub** (juba)
3. **Rumbek hub** (Rumbek center, Rumbek East)
4. **Unity hub** (Mayom)
5. **Kwajok hub** (Tonj South)

Proposed public health actions

1. Convene malaria taskforce or malaria technical working group meeting to ensure that operational readiness for malaria prevention, diagnosis, and treatment are optimized.
2. Field missions to conduct technical verification of the trends in the affected counties
3. Assessment of current stock levels of malaria diagnostics (RDTs), medicines (ACTs), and LLINs in the affected counties.
4. Stocking up on malaria prevention (LLINs), diagnostics (RDTs), medicines (ACTs), and enhancing behavioral change communication for malaria prevention, prompt investigation and initiation of treatment

Hepatitis E, Bentiu PoC

Hepatitis E cases reported by Epi Classification, week 1, 2018-02, 2019

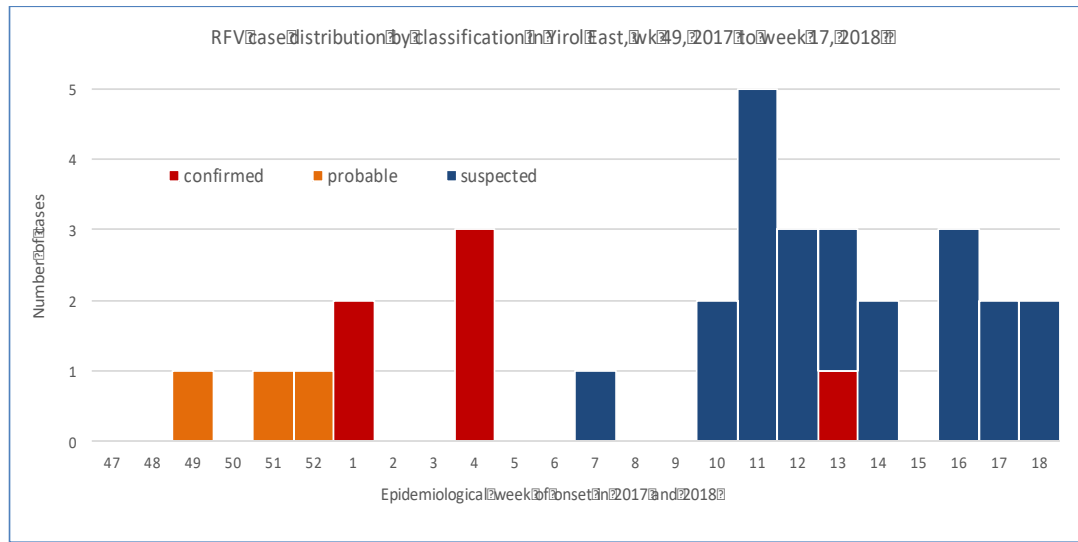
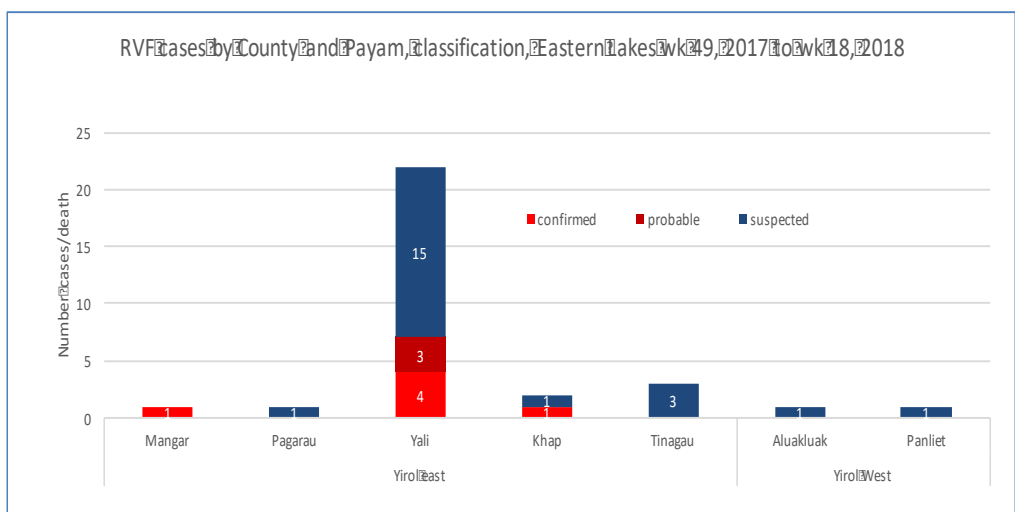
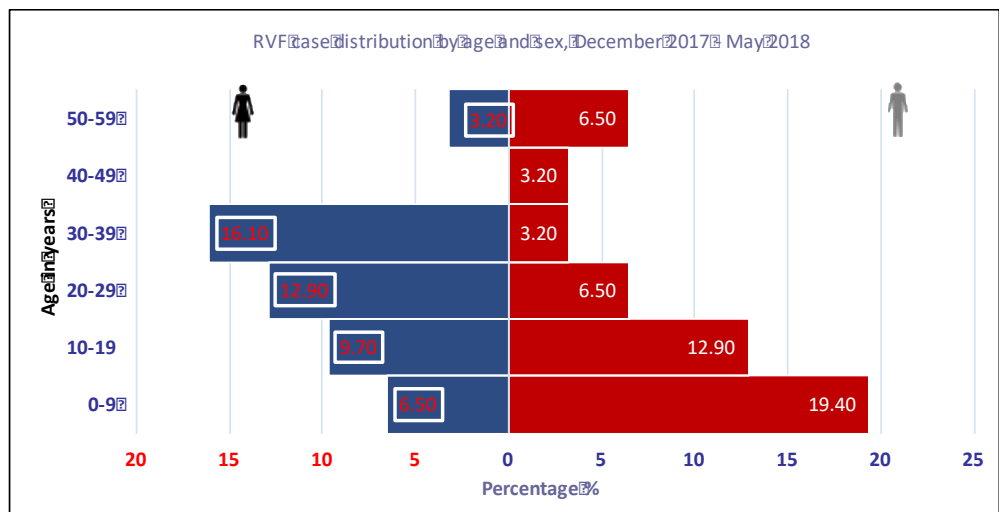


Bentiu PoC

- At least 159 suspect cases of Hepatitis E (HEV) have been reported in Bentiu PoC since early 2018. Of all the cases, 18 suspect cases were confirmed using PCR.
- The twelve (12) cases that were reported between week 50, 2018 and week 02, 2019 tested positive on RDT testing.
- Four cases reported in week 02, 2019
- One (1) mortality (CFR 0.65%) in 2018.
- Only 11 HEV cases have been admitted.
- The new cases in week 2 were treated as outpatient
- Males were more affected accounting for 57.2% (91) of all the cases
- Age group 15-44 years had the most cases, 55 (34.6%)
- Out of the 68 females cases that were reported, 27 (39.7%) were aged 15-44 years
 - At risk of adverse outcomes if infected in the 3rd trimester of pregnancy
- Use of stagnant water likely to be source of infection
- UNICEF has disseminated key HEV messages - on radio [Kondial FM & Bentiu FM] and through community sensitizations.
- Case identification and follow up in the communities and WASH interventions are

Age groups	Female, n(%)	Male, n(%)	Total cases, n(%)
<1 year	1 (0.6)	3 (1.9)	4 (2.5)
1-4 years	16 (10.1)	24 (15.1)	40 (25.2)
5-9 years	8 (5.0)	19 (11.9)	27 (17.0)
10-14 years	10 (6.3)	11 (6.9)	21 (13.2)
15-44 years	27 (17.0)	28 (17.6)	55 (34.6)
45+years	6 (3.8)	6 (3.8)	12 (7.6)
Total cases	68 (42.8)	91 (57.2)	159 (100)

Ongoing epidemics - Epidemic description - RVF Eastern Lakes state



Sno.	Description	Number
1	Suspect cases	58
2	Total deaths	4
3	Confirmed cases	6
4	Probable cases	3
5	Cases pending testing	01
6	Non-cases	48
7	Cases on admission	01
8	Total human samples collected	39
9	Total animal samples collected	28
10	Positive animal cases	9

- No new suspect RVF case reported from Yiol East in week 01, 2019.
- In the period 7 December 2017 to 16 Dec 2018, a total of 58 suspect RVF cases were reported in Eastern Lakes.
- These were reclassified based on investigations and laboratory results, such that as of 16^h Dec 2018, there were a total of six (6) RVF confirmed cases, three (3) probable, and 01 suspect RVF cases (either no samples collected or samples collected and test results are pending).
- Forty eight (48) 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

OTHER PUBLIC HEALTH THREATS

Brief epidemiological description and public health preparedness and response to select public health threats

EBOLA VIRUS DISEASE[EVD] PREPAREDNESS IN SOUTH SUDAN

Brief on the Ebola situation in DR Congo and updates on EVD preparedness in South Sudan

Ebola update DRC 14 Jan 2019

Current situation

- Currently in 24th week of the outbreak
- **658** Cases [609 confirmed & 49 probable]
- **402** Deaths [353 confirmed & 49 probable]
- **57** Health workers [54 confirmed; 20 dead]

Response update

- **4634** contacts under surveillance [81-92% followed up]; **60 460** vaccinated

Affected health zones

- **2** provinces [North Kivu & Ituri]
- **17** health zones [13 North Kivu & 4 Ituri]
- **72** cases in last 3 weeks: Katwa (33), Beni (13), Komanda (3), Butembo (13), Mabalako (4), Oicha (9), Kalungata (3), Musinene (1), Kyondo (1), Nyankunde (1), Biena (1), Vuhovi (1), Mangurujipa (1)

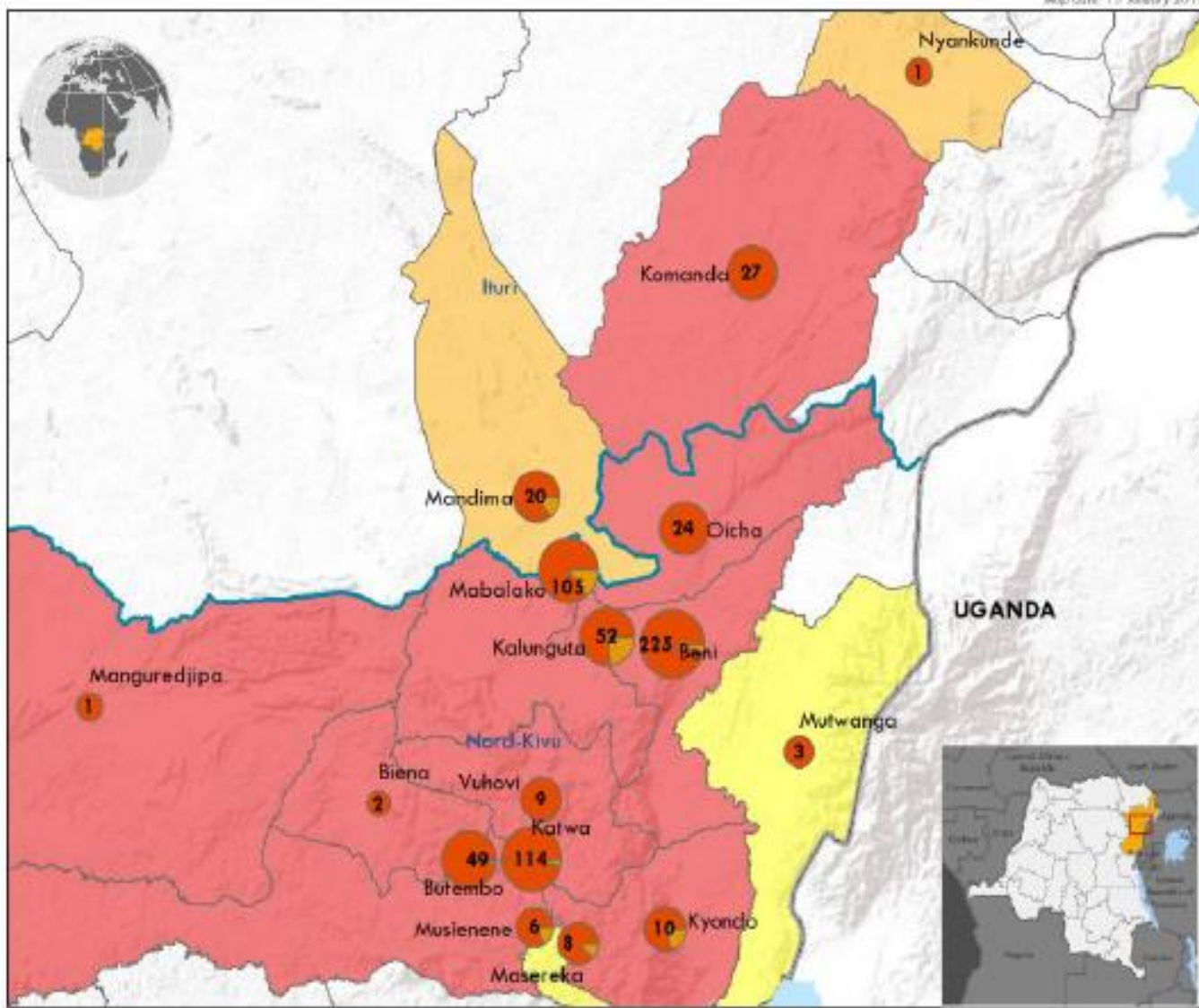
Boundaries and Locations Subject to Confirmation



No. days since last confirmed case



Province	ZS	Date of last reported confirmed case	No. of days since last case
NORD KIVU	Butembo	14/01/2019	0
NORD KIVU	Katwa	14/01/2019	0
NORD KIVU	Manguredjipa	14/01/2019	0
NORD KIVU	Musienene	14/01/2019	0
ITURI	Komanda	11/01/2019	3
NORD KIVU	Olcha	10/01/2019	4
NORD KIVU	Vuhovi	10/01/2019	4
NORD KIVU	Biema	9/01/2019	5
NORD KIVU	Mabalako	6/01/2019	8
NORD KIVU	Kalunguta	5/01/2019	9
NORD KIVU	Kyondo	5/01/2019	9
NORD KIVU	Beni	1/01/2019	13
ITURI	Nyankunde	22/12/2018	23
ITURI	Mandima	11/12/2018	34
NORD KIVU	Masereka	1/12/2018	44
NORD KIVU	Mutwanga	30/11/2018	45
ITURI	Tchomia	23/09/2018	113

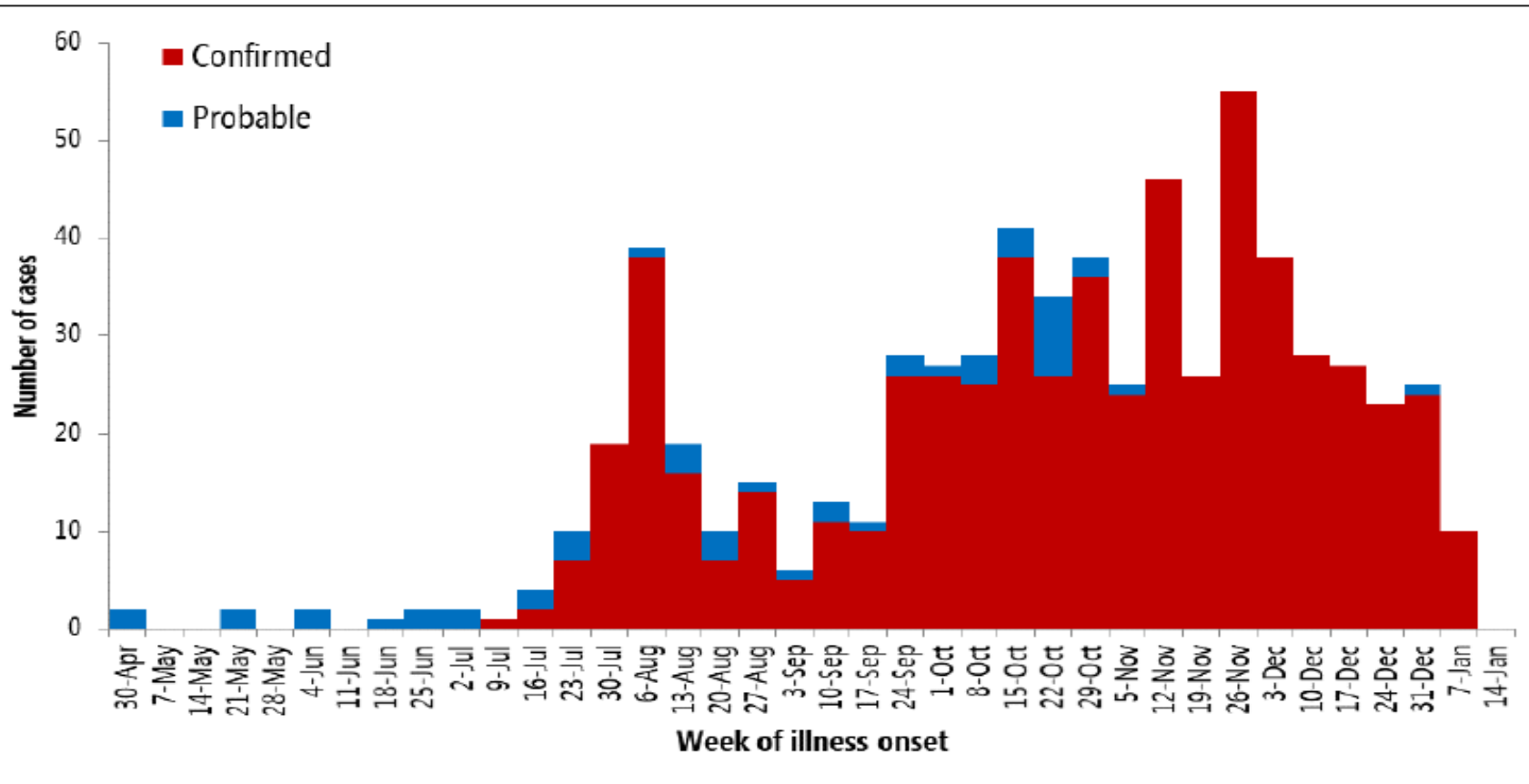


Data Source: World Health Organization, The Ministry of Health Democratic Republic of the Congo, CamilleWap, Map Production: WHO Health Emergencies Programme, Request ID: DRCC_NK_007

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The boundaries and names shown and/or the design used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Data not included here are those reported to WHO by the DRC. There may still be unreported cases.

EVD trends & case distribution in DR Congo



- Trends in case incidence reflects **continuation** of the outbreak
- **Multiple peaks** have been recorded since the outbreak was declared

EVD risk assessment

- Very high-risk of regional spread to priority 1 countries like South Sudan
- On 17 Oct 2018; Emergency committee determined that **EVD outbreak in DRC does not constitute** a Public Health Emergency of International Concern (PHEIC)
- Priority 1 countries like South Sudan urged to:
 - Accelerate **preparedness & surveillance**
 - Strengthen **risk communications**
 - **Vaccinating frontline HCWs** in areas bordering DRC

EVD preparedness activities undertaken in South Sudan

- South Sudan, as a priority one (1) country for Ebola virus disease outbreak (EVD) preparedness continues to make progress to enhance capacities for EVD case detection, investigation, response, and prevention.
- The national Ebola taskforce continues to meet twice weekly and is coordinating the implementation of the EVD contingency plan. The Ebola taskforce working groups are currently updating and implementing the EVD contingency plan to enhance readiness capacities for EVD response.
- Detailed preparedness update can be accessed <https://www.afro.who.int/publications/weekly-update-ebola-virus-disease-evd-preparedness-south-sudan>

Year: 2019

Week number: W2

From: 2019-01-07

To: 2019-01-13

Name of PoE	Passengers Screening Information			EVD Alerts		
	# screened	# Isolated	# under Voluntary Home Quarantine	# reported	# validated	# suspects
Bazl Border	536	0	0	0	0	0
Ezo	0	0	0	0	0	0
Gangura Border	0	0	0	0	0	0
Juba International Airport	4,198	0	0	0	0	0
Kaya	2,502	0	0	0	0	0
Kaya Border	0	0	0	0	0	0
Khorjo	2,012	0	0	0	0	0
Makpandu	0	0	0	0	0	0
Maridi Airstrip	0	0	0	0	0	0
Nimule Border	42,980	1	0	1	0	1
Okaba	690	0	0	0	0	0
Panjala Docking River	0	0	0	0	0	0
Pure	2,407	0	0	0	0	0
Sakure Border	0	0	0	0	0	0
Tikori	269	0	0	0	0	0
Wau Airport	0	0	0	0	0	0
Yambio Airport	0	0	0	0	0	0
Yei Airport	59	0	0	0	0	0
Yei RRC	12	0	0	0	0	0
South Sudan	66,886	1	0	1	0	1

[The electronic EWARS platform](#) captures points of entry screening data and enables summarizing number of travelers screened on weekly basis. In week 02 of 2019, 55,665 individuals were screened at various screening points in the country.

MAJOR SUSPECT OUTBREAKS & EVENTS REPORTED IN 2019

Listing of the major suspect outbreaks and public health events reported in 2018-2019

Response | Suspect outbreaks in 2019

Date of report	Disease suspected	Number cases (deaths)	County	Payam	Status of investigations
20/10/2018	Measles	3	Bor South	Bor PoC	At least three suspect measles cases reported from Bor PoC since 20/10/2018. All tested measles IgM positive following tests done in Juba. Reactive measles campaign planned.
24/11/2018	Yellow Fever	1	Nzara	Sakure	A suspect Ebola case was reported from Sakure on 23/11/2018 and investigated by the rapid response team on 24/11/2018. Preliminary testing in Juba on 24/11/2018 were negative for Ebola Zaire following GeneXpert testing. Further testing of the sample was PCR negative for all Ebola species; Marburg; Rift Valley Fever, Crimean Congo Hemorrhagic Fever, and Sosuga viruses. The sample eventually tested PCR positive for Yellow Fever.
12/10/2018	measles	82 (3)	Rumbek East		Suspect measles cases reported from Mabor Duang village, Aduel payam in Rumbek East where the initial suspect case was a 38 year female whose illness started on 12 October 2018 in week 41. The affected village is served by Mabor Duang PHCC . 82 cases including 9 confirmed cases and 3 death (CFR 3.6%) reported . Cases reported from six payams with most originating from Aduel; Atiaba, and Mathian kok. Majority of the cases, 55 (67%), were children < 5 years of age A total of 9 samples tested positive for measles IgM on 22 November 2018
24/12/2018	Dog bites	8	Bentiu	Bentiu PoC	A cluster of cases of dog bites has been reported in Bentiu PoC. Eight (8) cases have been seen at health facilities between 24 th Dec 2018 and 28 th Dec 2018. Majority (75%)

Response | Suspect outbreaks in 2019

Date of report	Disease suspected	Number cases (deaths)	County	Payam	Status of investigations
06/01/2019	Malaria alerts	counties with trends significantly higher than expected	8		Counties with malaria trends that exceed the threshold (third quartile of trends for the period 2013-2017) include: Aweil hub (Aweil East, Aweil West and Aweil North)
27/10/2018	Rubella	113	Malakall PoC		A total of 113 suspected rubella cases have been reported since week 43. No deaths reported. 41 cases are laboratory confirmed
31/12/2019	HEV	159	Bentiu PoC		At least 155 suspect cases of Hepatitis E (HEV) have been reported in Bentiu PoC in 2018. Of all the cases, 18 suspect cases were confirmed using PCR. The eight (8) cases were reported between week 50-52 tested positive on RDT testing. One (1) mortality (CFR 0.65%) in 2018. Resultst are pending.
06/01/2019	Acute Watery Diarrhea	467	Malakal PoC & Malakal Town		An increase in AWD cases in Malakal PoC and Malakal Town reported from week 51, 2018. Overall, 467 AWD cases to date. In Malakal PoC, a total of 333 cases (70 in week 51, 224 in week 52 and 39 in week 01). In Malakal Town, 134 cases (49 in week 52 and 85 in week 01). Assossa, Jalaba and Malakal Payams had the most number of cases. No mortalities reported.
06/01/2019	Measles	115	Abyei		Measles has been present in the area throughout the year, with about one suspected seen per week. A total of 45 suspected cases reported between week 7, 2018 and week 02,2019. The number of cases increased from week 50, 2018. Of all the cases, 35 (76%) were reported between week 51, 2018-02, 2019. Five (5) confirmed cases between week 51-52, 2018. No deaths reported

**This bulletin is produced by the Ministry of Health with
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**For more help and support,
please contact:**

Dr. Pinyi Nyimol Mawien
Director General Preventive Health Services
Ministry of Health
Republic of South Sudan
Telephone: +211916285676

Dr. Mathew Tut Moses
Director Emergency Preparedness and Response (EPR)
Ministry of Health
Republic of South Sudan
Telephone: +211922202028

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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>

