

INTEGRATED DISEASE SURVEILLANCE AND RESPONSE (IDSR) WEEK 43 (21 TO 27 OCTOBER 2019)

Surveillance Report

Surveillance and Disease Intelligence Unit
Zambia National Public Health Institute

Citation Style For This Article: Surveillance and Disease Intelligence Unit. Intergrated Disease Surveillance and Response. Health Press Zambia Bull. 2019; 3(10); pp 10-19.

Current outbreaks and public health threats

- Circulating Vaccine Derived Poliovirus Type 2 (cVDPV2) Outbreak: Countrywide zero (0)
- cases of cVDPV2 were reported from Chiengi district this reporting week.
- Cumulatively three (3) cases of cVDPV2 have been confirmed, one (1) index and two (2) asymptomatic contacts from the community
- The outbreak was declared on 17 October 2019 by the Ministry of Health. It is a Public Health Emergency of International Concern under the International Health Regulations (IHR) 2005.
- Cholera: Zero (0) cholera cases were reported from Nsama district, Northern province

Immediately notifiable diseases

- Acute Flaccid Paralysis (AFP): Four (4) cases were reported from North Western (2), Muchinga (1) and Northern (1) provinces. Three (3) specimens are under investigation for poliovirus at the National Polio Reference Laboratory in Lusaka
- Measles: A total of thirteen (13) cases measles were reported this week from Lusaka (6), Southern (2), Luapula (2) Copperbelt (1), North Western (1), and Northern (1) provinces. Eleven (11) specimens were investigated for measles & rubella
- Maternal Deaths: Eight (8) maternal deaths were registered in Eastern (2), Southern (2), Western (2), Central (1) and Luapula (1) provinces
- Neonatal Tetanus: One case was reported from Kafue district in Lusaka Province

Other diseases /Events

- Rabies: One (1) rabies death was reported from Kalabo district Western province
- Typhoid: Four (4) suspected typhoid cases in Lusaka district tested negative for S Typhi

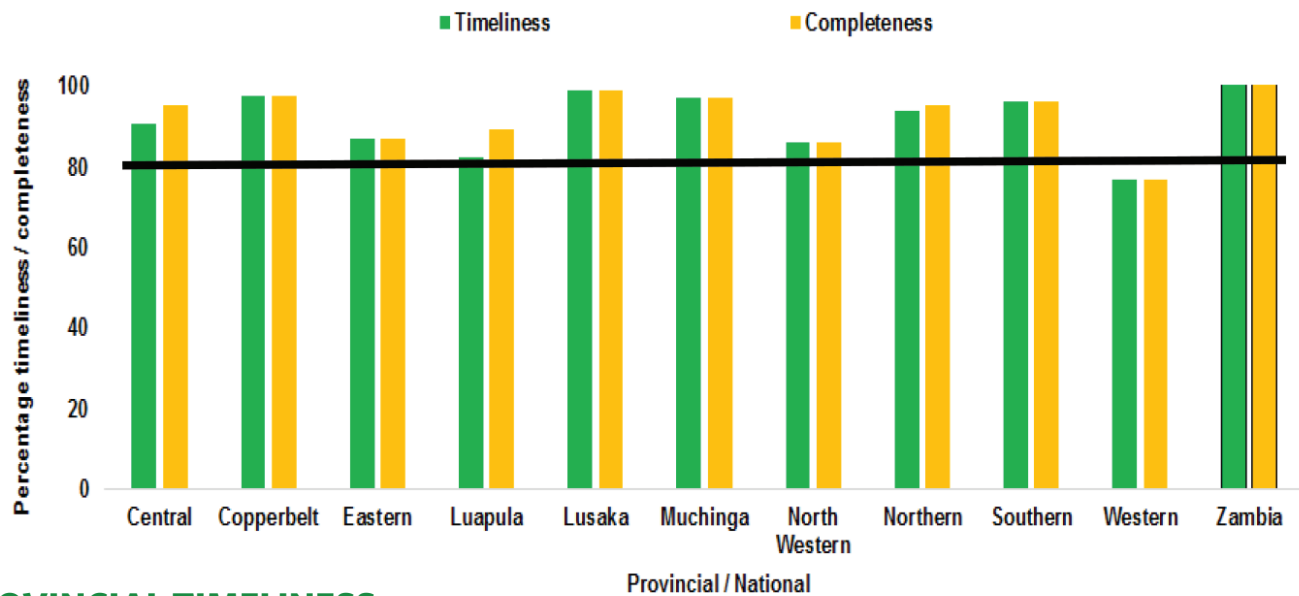
REGIONAL PUBLIC HEALTH EVENTS (CASES/ CFR)

Ebola	Measles	Cholera	Poliovirus (c VDPD)
DRC : 3,239 CFR 67%	Angola: 3128 CFR 2.0%	DRC: 22,314 CFR 1.7%	Angola: 18 CFR 0.0%
Uganda : Closed event	DRC: 209, 211 CFR 6.3 %		DRC: 57 CFR 0.0%

Source: WHO Weekly Bulletin on Outbreaks & Other Emergencies, Health & Emergencies Program

HEALTH FACILITY REPORTING TIMELINESS/ COMPLETENESS

Target 80 %



PROVINCIAL TIMELINESS

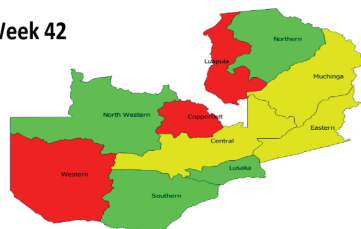
Province	WEEK 40	WEEK 41	WEEK 42	WEEK 43
Central	T	T	T	T
Copperbelt	T	T	T	T
Eastern	T	T	T	T
Luapula	T	T	T	T
Lusaka	T	T	NR	T
Muchinga	T	T	T	T
North Western	T	T	NR	L
Northern	T	T	T	T
Southern	T	T	T	T
Western	T	T	T	T

TIMELINESS: 90% (2203/2450) COMPLETENESS: 91% (2237/2450)

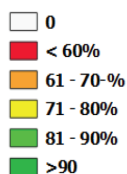
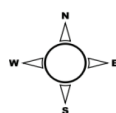
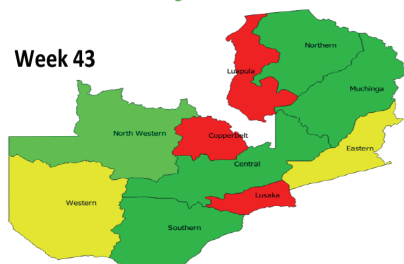
PAPER AND ELECTRONIC HEALTH FACILITY REPORTING COMPLETENESS WEEK 42 TO 43

Electronic Reporting Completeness

Week 42



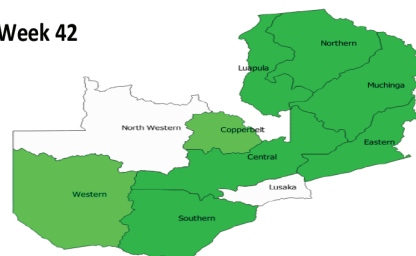
Week 43



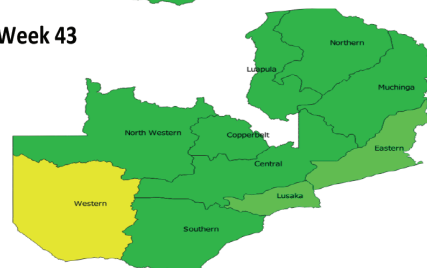
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Paper Reporting Completeness

Week 42



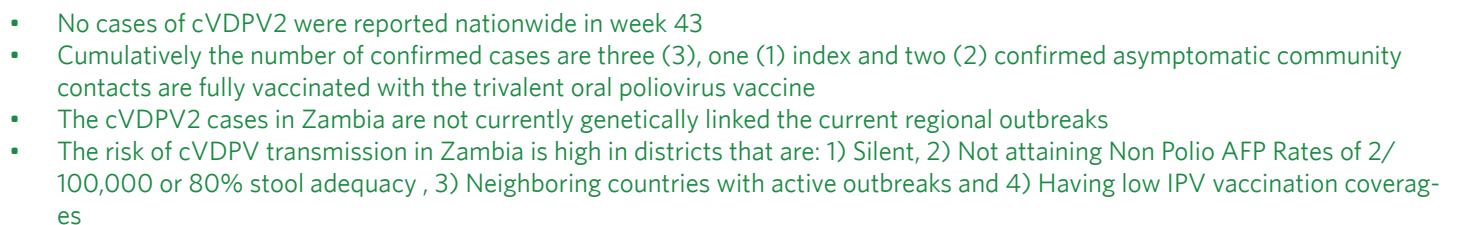
Week 43



SUMMARY REPORT PRIORITY DISEASES, CONDITIONS AND EVENTS (WEEK 39)

	Week 43			Week 1 to
	Suspected cases	Tested	Confirmed	Suspected cases
AFP	4	3	0	177
Cholera	0	0	0	461
Meningitis (Neisseria)	1	1	0	110
Measles	13	11	0	732
Neonatal Tetanus	1	0	0	0
Plague	0	0	0	0
Rabies	0	0	0	25
Dog bites	269			12,572
Dysentery	1,103	10	10	36,184
Typhoid fever	12	7	0	444
Yellow fever	0	0	0	9
VHF	0	0	0	0
Anthrax	0	0	0	10
Influenza	0	0	0	0
Non Bloody Diarrhoea	16,829	0	0	552,749
Schistosomiasis (Bilharzia)	446	78	45	16,921
Malaria	108,856	108,738	44,977	6,549,559
HIV	23,539	22,387	1,476	1,888,955
Tuberculosis (Source NTP)	1656	1,755	171	235,298
Maternal Death	8			546
Total	152,737	132,990	46,679	9,294,728

Vaccine Derived Polio Virus Type 2 Event (Currently no Evidence of Circulation)



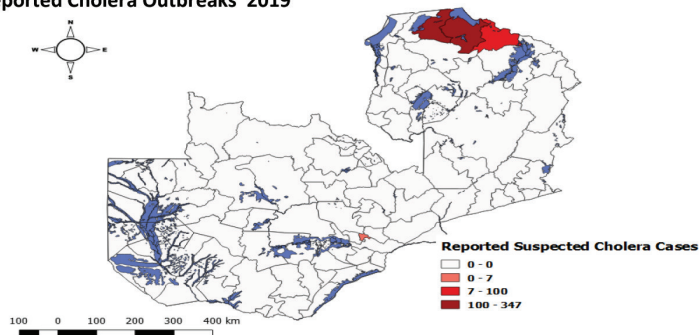
Reported Cholera Cases Week 1-43 2019, n461

Legend: Suspected Cases (Green), Positive (Yellow), CFR (Dashed Line)

Approximate data extracted from the chart:

Epidemiological Week	Suspected Cases	Positive	CFR (%)
1	0	0	4.2
2	0	0	4.2
3	0	0	4.2
4	0	0	4.2
5	5	2	4.2
6	7	3	4.2
7	2	1	4.2
8	1	0	4.2
9	0	0	4.2
10	0	0	4.2
11	15	5	4.2
12	52	8	4.2
13	18	7	4.2
14	18	0	4.2
15	5	2	4.2
16	25	3	4.2
17	16	0	4.2
18	13	2	4.2
19	20	27	4.2
20	65	18	4.2
21	94	6	4.2
22	32	8	4.2
23	30	5	4.2
24	7	0	4.2
25	0	0	4.2
26	0	0	4.2
27	3	0	4.2
28	0	0	4.2
29	0	0	4.2
30	0	0	4.2
31	0	0	4.2
32	0	0	4.2
33	0	0	4.2
34	5	2	4.2
35	7	3	4.2
36	0	0	4.2
37	0	0	4.2
38	0	0	4.2
39	4	1	4.2
40	9	0	4.2
41	0	0	4.2
42	0	0	4.2
43	0	0	4.2

Reported Cholera Outbreaks 2019



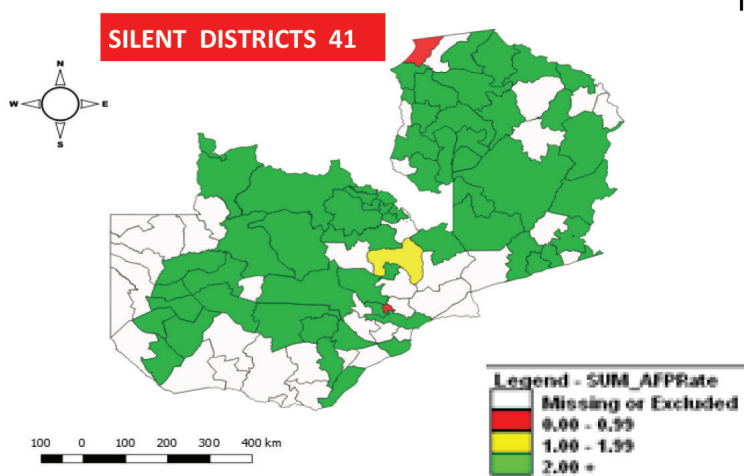
- No (0) cholera cases reported
- The last confirmed case was reported in week 40 from Nsama district
- Nationwide six (6) cholera outbreaks have occurred in Lusaka (1), Mpulungu (1), Mbala (1) and Nsama (3)

VACCINE PREVENTABLE DISEASES

Poliovirus Surveillance

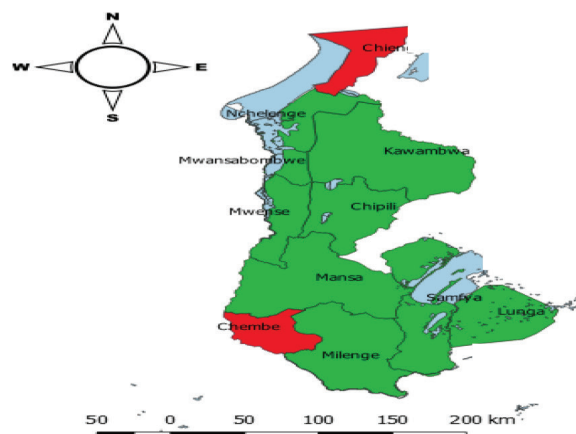
Performance of AFP Surveillance, 2019, Zambia (Data submitted from provinces week 43, 2019)										
Provinces	2019 estimates <15 pop (million)	Annual Expected AFP Cases	All Reported Cases in database	Only AFP cases	Annualized Non-polio AFP rate	AFP cases with 2 stools within 14 days		Confirmed		Compatible (virologic Classification system)
						(0-14d)	%	VDPV	Wild	
Central	0.8	16	20	20	3.0	18	90%	0	0	0
Copperbelt	1.2	24	37	37	3.7	30	81%	0	0	0
Eastern	0.9	18	13	13	1.7	11	85%	0	0	0
Luapula	0.6	11	26	26	4.9	26	100%	3	0	0
Lusaka	1.5	30	6	6	0.5	5	83%	0	0	0
Muchinga	0.5	9	11	11	2.8	11	100%	0	0	0
North Western	0.4	8	14	14	4.0	14	100%	0	0	0
Northern	0.7	13	19	19	3.4	18	95%	0	0	0
Southern	0.9	17	7	7	1.0	5	71%	0	0	0
Western	0.5	10	24	24	5.8	21	88%	0	0	0
Zambia	7.9	158	177	177	2.7	159	90%	3	0	0
Surveillance gap										
Yellow for NPAFP rate - certification level BUT surveillance gap for stool adequacy										
Green indicates provinces with operational + certification-level surveillance										

NON POLIO AFP REPORTING RATE BY DISTRICT



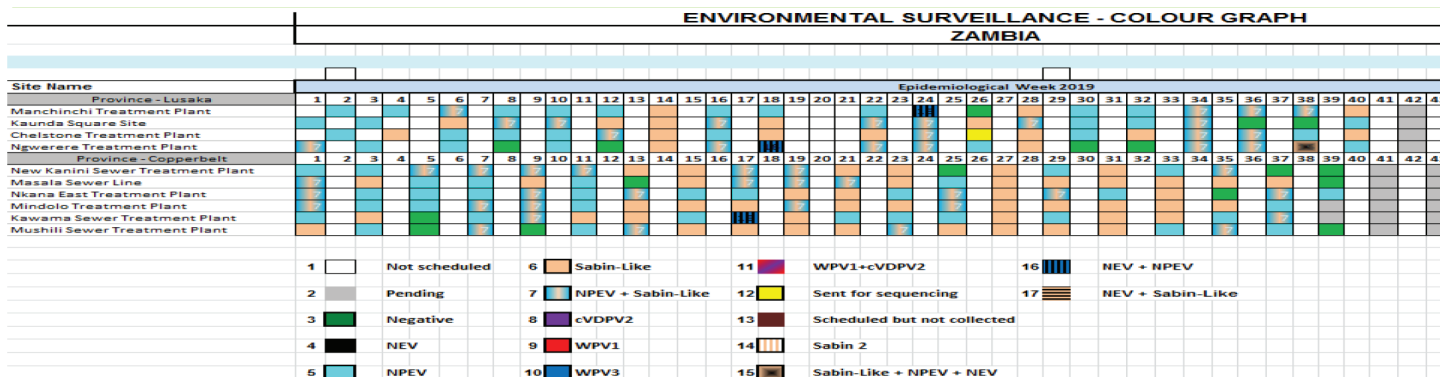
CHIENGI DISTRICT LUAPULA PROVINCE AFP INDICATORS

Non Polio AFP Rate 0/100,000, Stool Adequacy 100%



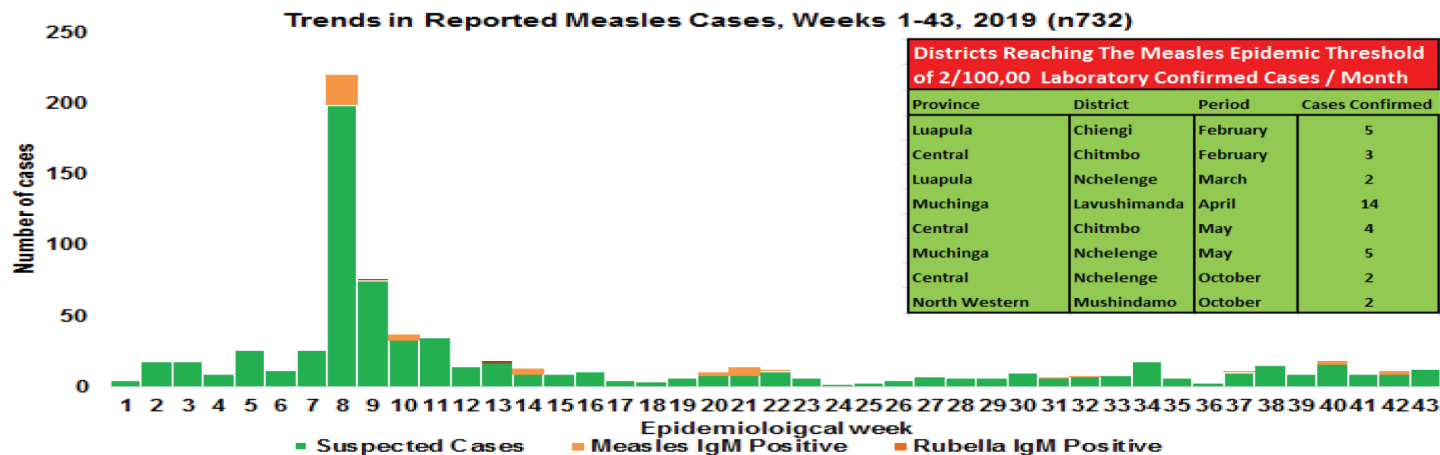
- Six (6) cases were reported this week
- Of the 177 laboratory investigated AFP cases 144 adequate samples have been discarded for polioviruses, 7 test results are pending results
- 59% have had 3 or more doses of OPV
- Provinces are to conduct 60 day follow ups for inadequate samples and ensure all cases are given a final classification by 90 days

Poliovirus Environmental Surveillance



- Scheduled collections from the Lusaka Province were conducted
- Non Polio Enteroviruses detection for ES polio is U50% isolation & is among 7.3% AFP cases
- Countrywide no VDPV have been isolated from ES sites

Measles & Rubella surveillance



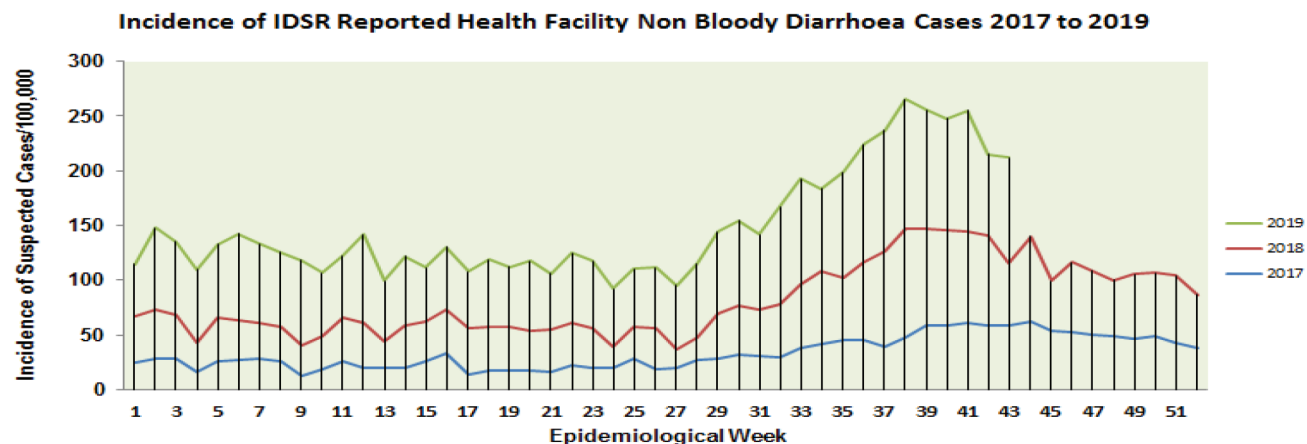
NON REPORTING SILENT DISTRICTS 71



- Thirteen (13) cases were reported
- Only 35% of the 732 IDSR
- reported cases have been tested
- Positivity among tested cases for
- measles IgM is 11.8% (target 10%) and 0.8% for rubella
- 25% have history of vaccination
- 85% of the positive cases are under 10 years of age

HIGH BURDEN DISEASES

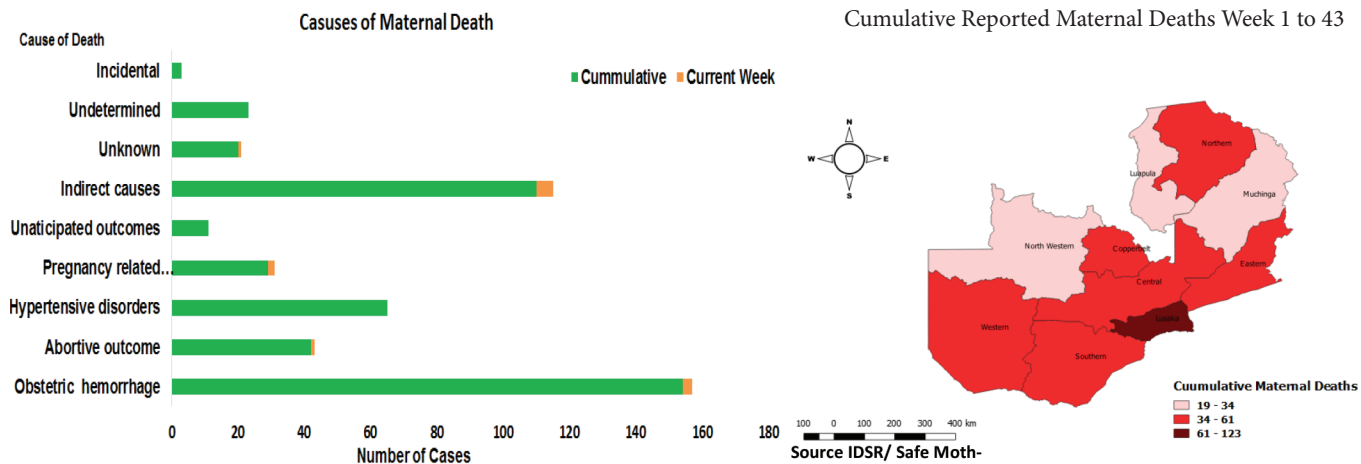
Non Bloody Diarrhoea



- Countrywide incidence of reported suspected Non-Bloody Diarrheas (NBD) is 96.8 100,000 population i
- Central, North Western, and Southern provinces have recorded the highest incidence of NBD cases with 53, 52 and 46 cases per 100,000 respectively from week 1
- Following a seasonal increase in cases reported from week 24, the epi curve this week shows a decline cases from week 38 similar to trends seen in 2018 and 2017.

HIGH PRIORITY DISEASES

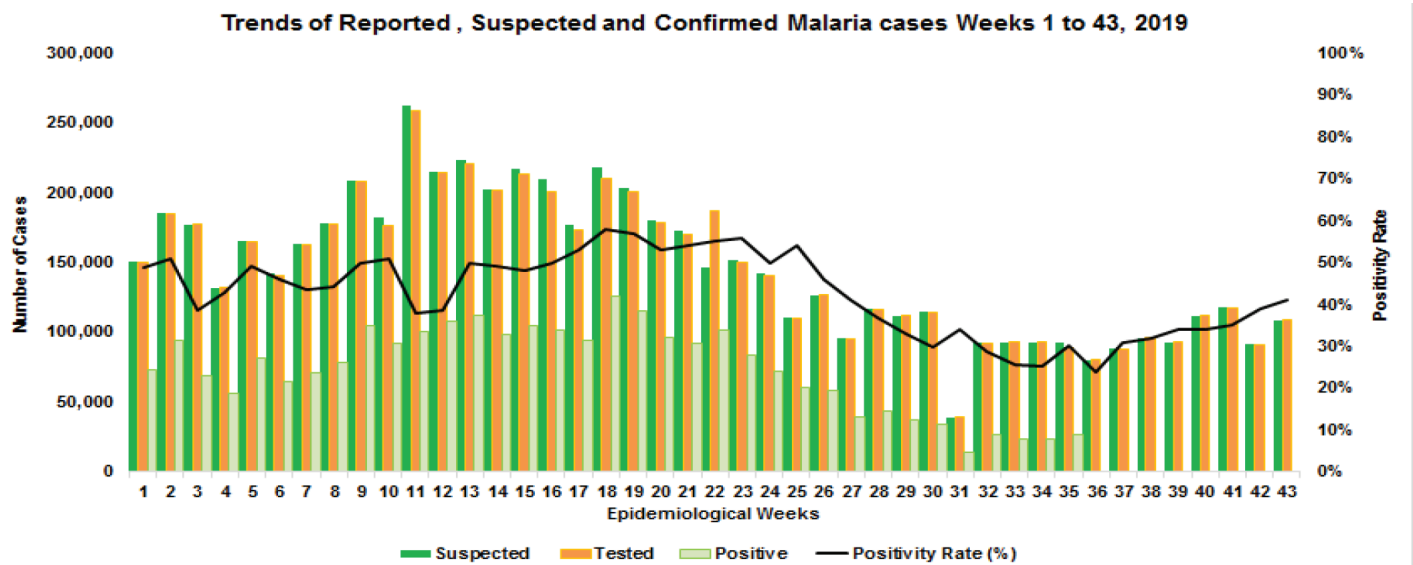
Maternal Deaths



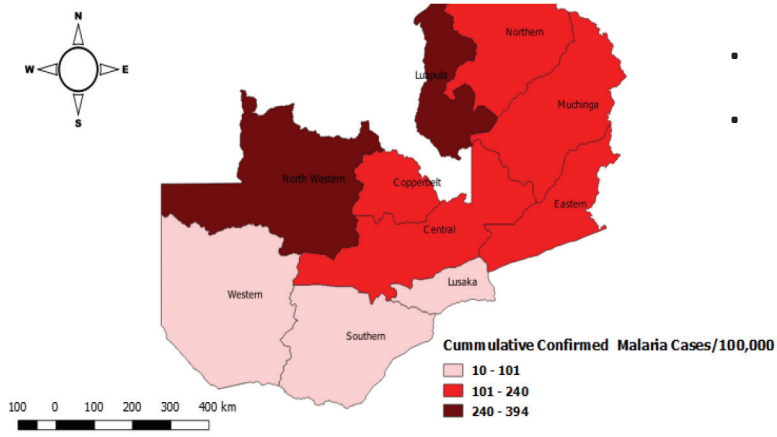
- Nationwide nine (9) maternal deaths were registered this week
- Obstetric hemorrhages continue to be the leading cause of death.
- Lusaka province has cumulatively recorded the highest number of deaths since week 1.

HIGH BURDEN DISEASES

Malaria



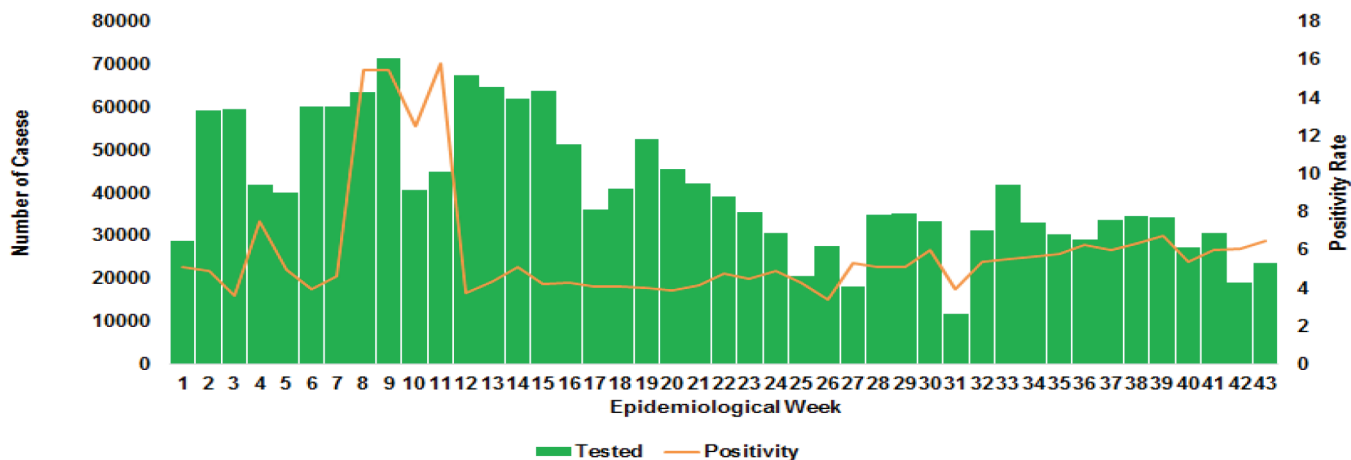
Cumulative Incidence Malaria by Province



- Malaria is the leading cause of morbidity accounting for 72% of all notifiable diseases
- 108,856 suspected cases were reported this week; with a positivity rate of 41% among 108,738 tested cases.
- North Western and Luapula provinces recorded the highest cumulative incidence of malaria cases from week 1 to 43

HIGH BURDEN DISEASES HIV

Health Facility HIV Testing and Positivity Rates Weeks 1-43, 2019

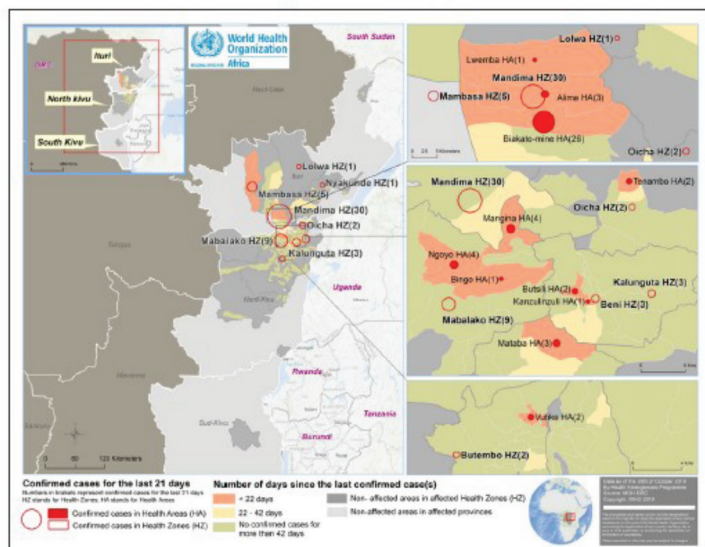


- 19,119 people were tested for HIV in the week under review, with a positivity rate of 6.1%.
- Central, Lusaka and Luapula provinces have cumulatively reported the highest incidence of confirmed HIV of 929, 713 and 539 cases per 100,000 population, respectively, from week 1.

Ebola Virus, DRC and Uganda, 2018-2019

- The EVD outbreak was declared a Public Health Emergency of International Concern in DRC on 17 July 2019
- 23 new confirmed cases and 11 new deaths were reported in the current week.
- Cumulative cases stand at 3,263 of which 3,146 are confirmed and 2180 deaths occurred (CFR is 67%).
- Active transmission is ongoing with 9 of the 29 health reporting zones confirming cases in the last 21 days.
- Partners and Zambia continue preparing EVD surveillance & preparedness in at risk districts
- **The regional risk of spread remains high**

Geographical distribution of confirmed Ebola virus disease cases reported from 6 to 26 October 2019, North Kivu, South Kivu and Ituri provinces, Democratic Republic of the Congo



PUBLIC HEALTH ACTIONS

General Recommendations

- Response pillars at ZNPHI to continue working with partners to strengthen surveillance, laboratory and epidemic preparedness for Polioviruses, EVD, , Cholera , Measles and other public health threats
- Provincial health and veterinary municipalities to quickly respond to suspected rabies cases, promote vaccination of dogs and sensitize communities on rabies prevention /treatment
- Provinces to oversee that epidemic preparedness consumables (including vaccines, water testing kits and chlorine distribution) are distributed to districts at risk of outbreaks
- Provinces should ensure that epidemic preparedness committees (provincial and districts) are functional, represented by all key multisector stakeholders & hold regular meetings

Heightened Vaccine-Preventable Disease Surveillance in Silent Districts

- Chiengwe district is to increase the annualized Non Polio AFP rate to 4 cases /100,000 of children detected under 15 years
- All district in Luapula Province to ensure timely reporting from all health facilities
- Conduct and report active geocoded searches at priority sites as per recommended schedule
- Provinces to ensure silent districts not reporting AFP/measles cases are supported for active surveillance of cases
- Provinces are to ensure health workers are sensitized for improved detection, reporting and investigation of suspected measles and AFP cases
- Provincial health offices to ensure sub regional attainment of the Non-Polio AFP and non Febrile Rash rate of 2 cases per 100,000

Ebola Virus Disease Preparedness

- All provinces to strengthen EVD surveillance among all health care providers and raise community awareness of EVD prevention
- Provide weekly reports in IDSR reports of active searches including zero reporting in at risk districts, including ports of entry
- Ensure epidemic preparedness measures for detecting cases, sample testing / transportation and managing cases are effected
- All border districts to strengthen point of entry EVD screening including facilitation of cross border monitoring and reporting of suspected EVD cases

Heightened Surveillance in Cholera Hotspots

- Nsama and neighbouring districts to continue to support the ongoing outbreak through heightened active surveillance, management of cholera cases and timely reporting of epidemiological changes
- Health education to sensitize communities and health workers on cholera preventative measures
- WASH continue water monitoring and distribution of chlorine in identified at risk populations
- Provincial epidemic preparedness committee's to engage all relevant government stakeholders and multisector partners required to prevent cholera outbreaks

- Writers: Chanda Groeneveld, Moses Banda, Muzala Kapin'a, Nkomba Kayeyi, Mazyanga M Liwewe, Victor Mukonka and Zambia National Public Health Institute (ZNPHI)