

Situational Report No. 141

Outbreak Name: Cholera	Investigation start date: 4 th October, 2017
Date of report: 1 st March, 2018	Prepared by: MOH/ZNPHI/WHO

1. SITUATION UPDATE

- Lusaka District:** As of 06:00hours today Thursday 1st March, 2018, there were **21 new cases (9 children and 12 adults); there were no cholera deaths** recorded in the last 24 hours.
 - There were 26 patients under treatment; 19 patients had been discharged
 - Cumulative cases for Lusaka district now stand at **4,076 with 75 deaths**
 - Based on the most recent statistics, the case fatality rate of the current outbreak is **1.84% (facility CFR=0.72%)** with a weekly incidence rate of **5/100,000population¹ at the close of week 8.**

Table 1: Summary of cases reported to CTCs in Lusaka District as of 06hours on 1st March 2018

CTC/CTU	New Admissions	Deaths in 24hrs	Current Admissions	Cum. Cases	Cum. Deaths
Kanyama	3	0	0	1233	32
Chipata	3	0	0	1239	27
Matero	0	0	0	523	10
Chawama	6	0	16	541	3
Bauleni	0	0	0	68	0
Chelstone	2	0	0	87	2
Heroes	7	0	20	385	1
Total	21	0	36*	4076	75

*15 children and 21 adults

- Cholera cases reported from outside Lusaka District:**
 - There were **four (4) new cases** reported from other districts in the last 24 hours; 2 from Kafue (all residents of Zambia compound), and 2 from Chikankata (the index case was from Sable compound and is epi-linked to Shibuyunji). Additionally, three previously suspected cholera cases from Mongu, one of whom was epi-linked to Mtendere, were added to the line list following confirmation.
 - There were **no cholera deaths recorded.**
 - There were 7 patients under treatment (3 in Kafue, 2 in Chikankata and 2 in Mongu); three (3) patients had been discharged
 - The cumulative number of cases from other districts now stands at 340. There have been 14 deaths recorded over the course of the outbreak.

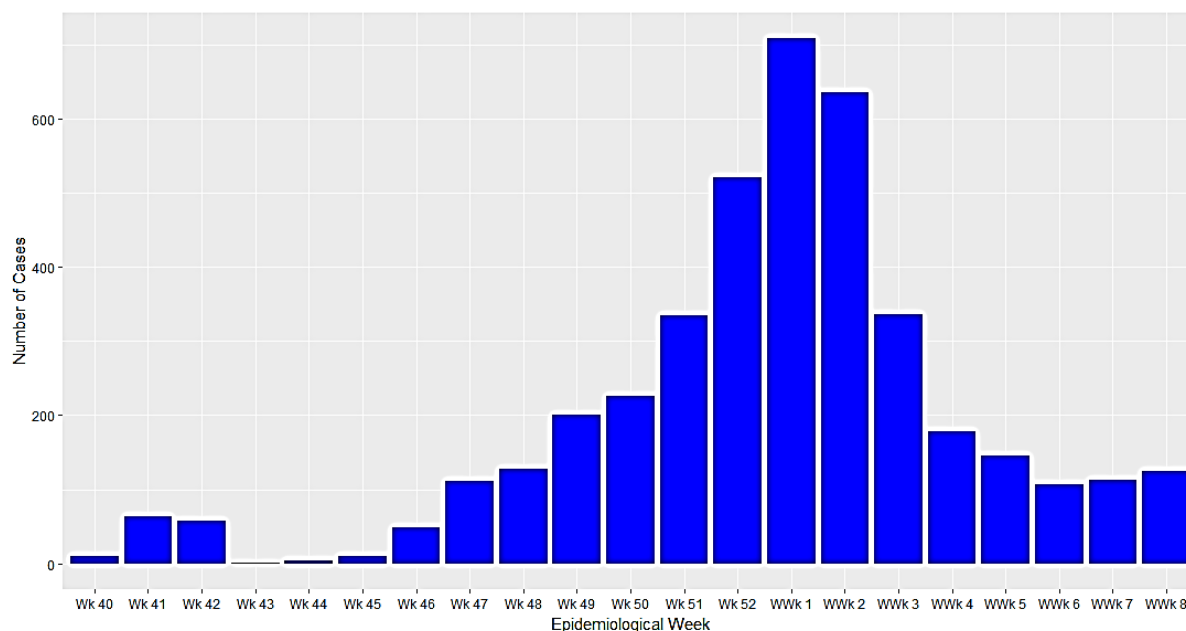
¹ 128 new cases and 0 deaths reported from 18th - 24th February 2018, compared to 118 new cases and 0 deaths the previous week

- **Country wide:** the cumulative number of cases recorded is **4,416 with 89 deaths**

	Sub-district (total new cases)	Cases by Area of Residence (# of cases)
1	Chipata (3)	Kabanana (2), Mazyopa (1)
2	Matero (2)	George (1), 10 miles (1)
3	Kanyama (7)	Old Kanyama (4), New Kanyama (1), Kanyama West (1), Garden House (1)
4	Chawama (4)	Misisi (1), Kuomboka (1), Kuku (2)
5	Chelstone (3)	Mtendere (1), Obama (1), Kamanga (1)
6	Chilenje (1)	Bauleni (1)
7	Chilanga (1)	Maloni (1)

Table 2: Distribution of cases reporting in the last 24hrs by area of residence

Figure 1: Epidemic curve of cholera cases recorded in Lusaka district by week of onset as at close of Week 8 2018



2. BACKGROUND

The outbreak was declared on 6th October, 2017 after laboratory confirmation of two cases from Mazyopa area in Chipata sub-district, who reported to the Chipata Level One Hospital with acute watery diarrhoea on 4th October, 2017. Kanyama reported the first suspected case of cholera on 8th October, 2017. The patient was a 3 month old baby who was brought in dead after a bought of diarrhoea. The rapid diagnostic test (RDT) was positive from a rectal swab specimen.

3. RESPONSE CO-ORDINATION

3.1 Political Will and Leadership

- The Honourable Minister of Health, Dr Chitalu Chilufya MP, hosts a daily meeting to coordinate water, sanitation and resources being channelled to the response.
 - Senior members of staff representing the different stakeholders including the line ministries, co-operating partners, Lusaka Water and Sewerage Company (LWSC), Lusaka City Council (LCC), Disaster Management and Mitigation Unit (DMMU), Defence Forces, as well as WASH and health promotion teams attend.
- The Government of Zambia continues to draw resources from its treasury to support the response, including provision of clean and safe water, waste management, health promotion and clinical management.
- The Honourable Minister of Health, through the provisions of the laws of Zambia, invoked the Public Health Act, (Laws, Volume 17, Cap. 295), the Public Health (Infected Areas) (Cholera) Regulations, 2017 and issued **Statutory Instrument No. 79 of 2017** to facilitate the implementation of an enhanced approach to mitigate the current cholera outbreak.
- The Honourable Minister of Local Government, through the provisions of the laws of Zambia, issued **Statutory Instrument No. 10 of 2018**. The Local Government Act (Cap. 288), the Local Government (Street Vending and Nuisances) (Amendment) Regulations 2018 has been effected to ensure the outbreak is mitigated and prevented from re-occurring.
- The Ministry of Fisheries and Livestock has issued a Gazette notice on the **extension of the fishing ban for the 2017/18 season in cholera affected areas to 30th April 2018**. Fishing camps in unaffected areas will be inspected; those with inadequate sanitary facilities shall remain closed.

3.2 National Epidemic Preparedness, Prevention, Control & Management

- The National Epidemic Preparedness, Prevention, Control & Management Committee has held extra-ordinary meetings every Thursday to review the outbreak situation and progress of implemented interventions.

4. ACTIONS TO DATE

4.1 Oral Cholera Vaccine Campaign

- The Government of the Republic of Zambia with the support of World Health Organisation facilitated and provided resources to procure the Oral Cholera Vaccine (OCV)
- **Round one** of the OCV campaign, which run from 10th to 20th January 2018, recorded 1,317,925 people vaccinated, with a coverage 109%. The coverage included 1,407 vaccinated inmates at Lusaka Central Prison.
- **Round two** of the OCV campaign commenced in Chawama and Kanyama on **Monday 5th February 2018** and closed on **Wednesday 14th February 2018**.
 - The heavy downpour in most cases resulted in reduced numbers of people accessing the vaccination centres. This necessitated a re-strategising of efforts, including door to door vaccinations.
- The OCV Round 2 schedule for other areas will be communicated in due course; Chipata and Matero are currently scheduled to receive the vaccine next.
- The Ministry of Education has approved the delayed opening of schools in the hotspots in order to ensure that target populations receive the vaccine

Table 3: Comparison of Round 1 and Round 2 immunisation coverage in Chawama & Kanyama

Sub-district	Target Population*	Round 1 total vaccinated (% coverage)	Round 2 total vaccinated (% coverage)
Chawama	238,807	235,227 (99.0%)	301,928 (126.4%)
Kanyama	242,302	331,841 (137.0%)	409,776 (169.1%)
Total	481,109	567,068 (118.0%)	711,704 (147.9%)

*Target populations have been recalculated based on head count instead of CSO estimations

4.2 Surveillance and Case management:

- **Surveillance:** Sporadic cases continue to be recorded. Interventions including contact tracing, chlorine distribution and water sampling are being mounted in all areas.
- **Case definition:** Zambia is currently using the WHO standard case definition of suspected and confirmed cholera **regardless of age:**
 - Suspected: Any Patient presenting with acute watery or rice watery diarrhoea with or without vomiting and signs of dehydration should be suspected as a case of cholera during an outbreak

- Confirmed: A suspected case in which *Vibrio cholerae* O1 or O139 has been isolated in stool.
 - * **Children under 2 years can also be affected during an outbreak**
 - ** Acute watery diarrhoea: passage of watery or liquid stools ≥ 3 times in the last 24 hours
- **Case management:** In order to manage the growing number of cases while maximizing the available resources (i.e. supplies, equipment and human resource), 5 of the initial Cholera Treatment Centers in Kanyama, Chipata, Matero, Bauleni and Chelstone sub-districts have been converted to Cholera Treatment Units. Chawama CTC was converted to a main Cholera Treatment Centre to cover the southern population of Lusaka district and serves as a referral centre. It has a 41 bed capacity and room for expansion, and a functional referral system. The main Cholera Treatment Hospital was set up at the Heroes Stadium for the northern part, with a 500 bed capacity and room for expansion.
- **Mentorship of frontline workers:** 2-3 hour mentorship visits are being conducted as well as bedside mentorship. CDC in collaboration with the ZNPHI produced jobs aids detailing the case definition and treatment plans. Flow charts for assessment, transfer criteria and discharge criteria were made available.
- **Management of Alcohol Delirium Tremens and all other Mental Disorders:** A number of patients have been noted to present with alcohol delirium tremens and other mental disorders. A specialized team from Chainama Hills College Hospital has been assigned to the case management team. As of 24th February 2018, cumulatively, 535 patients had been seen. Medical, psychosocial, nutritional treatments and laboratory services have been offered successfully.

4.3 Laboratory:

- **UTH Bacteriology Laboratory Report (24/02/18):**
 - 1,091 cumulative samples have been processed by the laboratory since 4/10/17; **357** have been culture positive for *Vibrio cholerae* O1 Ogawa; 8 for *Salmonella*; and 7 for *Shigella*.
 - Antibiotic susceptibility testing is ongoing to monitor sensitivity patterns against 5 antibiotics.
- **FDCL Daily Report (01/03/18):**
 - Of the 28 water samples analysed, 8 were positive for fecal coliforms; none were positive for *Vibrio cholerae*

4.4 Environment and WASH interventions:

- **LWSC preparedness and response activities:**
 - **Delivery of water by Bowser:** There were 35 bowsers in service. Deliveries increased to 3,434,000L (from 2,017,000L the previous day)
 - Chipata, Chaisa, Chunga, Ngombe, Garden, Bauleni, Kalingalinga and Mtendere:** 14 bowsers were in service; 2,051,000L of safe water were supplied
 - Chawama:** 5 bowsers were in service; 227,000L of safe water were supplied
 - Kanyama:** 16 bowsers were in service; 1,156,000L of safe water were supplied
- **International School/Lukasu Road Sewer Overflow:** A total length of 318m of pipeline were laid, three additional pipes need to be laid for final level connection to the manhole. The construction of the manhole is scheduled for Friday 2nd March 2018, and the line is expected to be activated on Sunday 4th March 2018. Five additional manholes will be constructed after the line is commissioned.
- **Water supply improvement to Zambia compound, Kafue:** 3km of network extensions with 500 connections are planned. The connections will comprise both individual and public stand posts. An assessment for the erection of temporal tank stands found that this was not a feasible option. A number of households with prepaid meter connections were found to have no water due to lack of credit.

4.5 Health Promotion and Communications

- There are currently 480 community based volunteers (CBVs) assigned to field activities, with support from UNICEF, Oxfam, the Zambia Red Cross and CHAZ
- Door to door outreach as well as church, market and school sensitisation are ongoing.
- The DMMU call centre numbers are 909 (toll free); 0963 930 779; 0976 904 261/73; 0956 513 193/79. A total of 168 successful, 49 unsuccessful and 71 missed calls were recorded.
- The Ministry of Health has been allocated free air on public and private and radio stations for interviews and discussions pertaining to cholera matters. Technocrats and policy makers feature on these programs to give updates on the outbreak and decisions and or interventions implemented.
- The MoH continues to disseminate health messages and other information through Press briefs (hosted by one or more of the Ministers in the response or the Permanent secretary

to MOH), Public Health Address Systems with the support of Zambia National Information Service (ZANIS), Brochures and Posters

5. Gaps and Challenges

➤ Environment and WASH

- Fishing ban:
 - i. some resistance to the ban being faced from provinces that have not recorded any cholera cases
- LCC:
 - i. Resistance by some marketeers in Justin Kabwe area to the ban on use of pit latrines in the main market
- LWSC:
 - i. Interruption of power supply over the last three days has affected water supply
 - ii. Heavy rainfall has resulted in flooding and overflow of septic tanks and pit latrines
 - iii. Costly nature of water delivery by bowser
 - iv. Some tanks are inaccessible due to deteriorating condition of roads following the rains

6. Priority actions & Recommendations

➤ Case management:

- Training and continuous mentorship of CTC staff
- Strengthening lab confirmation and epi-linkage of all cases

➤ LWSC

- Maintenance of residual chlorine level of 0.5mg/L in all supplied water

➤ Fishing ban:

- Engagement of chiefs to ensure the message trickles down to the communities

➤ Health Promotion and Communication:

- Continued engagement and sensitization of communities on hygiene practice and prevention of cholera



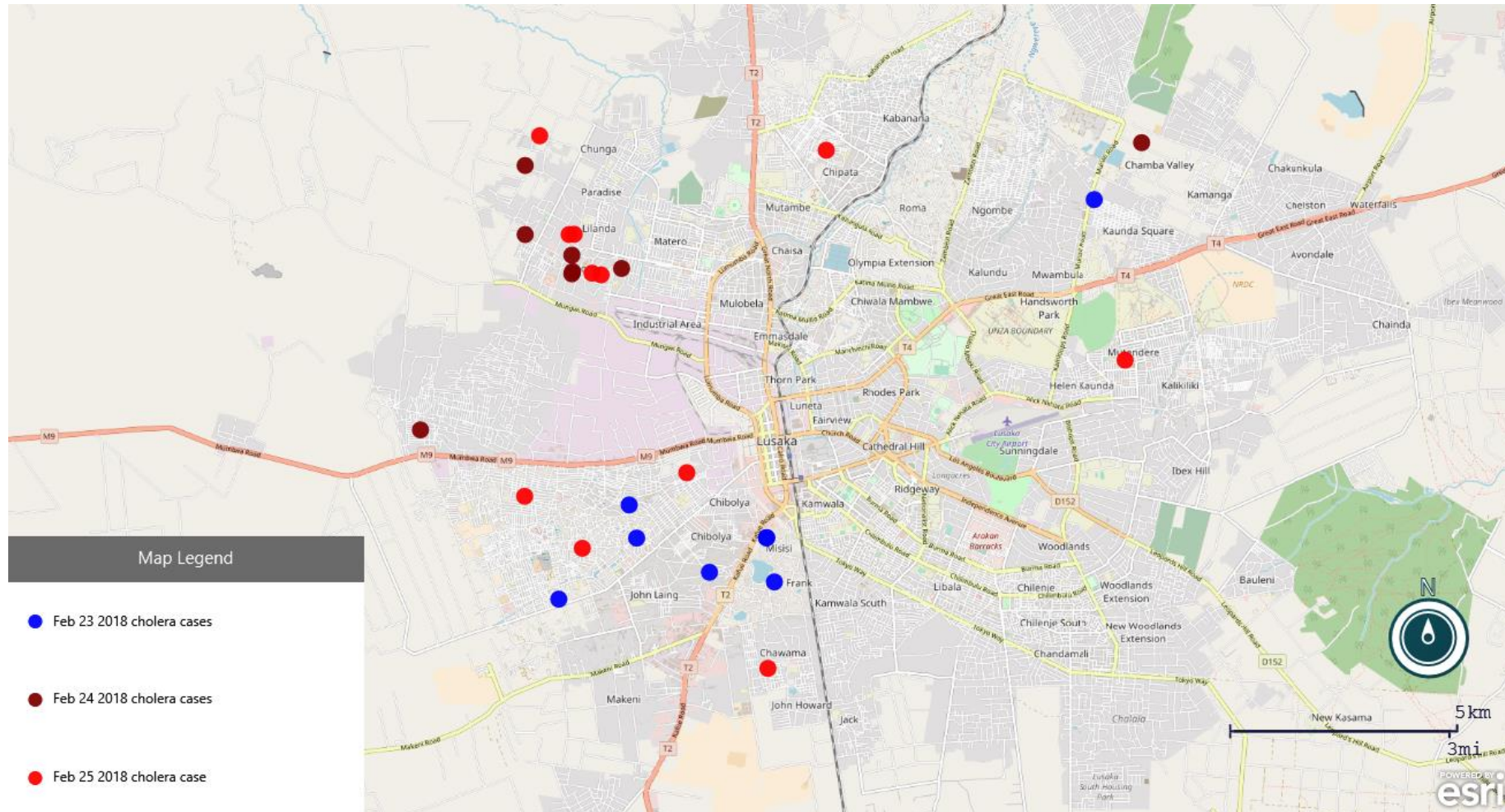
7. Conclusion

Intervention efforts in areas that continue to report sporadic cases such as Maloni, Kafue and Mazyopa must be stepped up. With the reduction in case numbers and given that this is diarrhoea season, all new cases must be subjected to lab confirmation.

Effective case management, provision of safe water, contact tracing, environmental investigations, and health promotion activities continue to be implemented in all areas, and scaled up where necessary



Annex 1: Map of cholera cases recorded in Lusaka district from 23-25 February 2018



Annex 2: Incidence of cholera cases recorded in Lusaka district by sub-district as at the close of Week 8 2018

