

Situational Report No. 122

Outbreak Name: Cholera	Investigation start date: 4 th October, 2017
Date of report: 10 th February, 2018	Prepared by: MOH/ZNPHI/WHO

1. SITUATION UPDATE

- Lusaka District:** As of 06:00hours on 10th February, 2018, there were **13 new cases (4 paediatrics and 9 adults)**; there were **no cholera deaths** recorded in the last 24 hours.
 - There were 19 patients under treatment; 16 patients had been discharged
 - Cumulative cases for Lusaka district now stand at **3,757¹ with 75 deaths**
 - Based on the most recent statistics, the case fatality rate of the current outbreak is **2.0% (facility CFR=0.8%)** with a weekly incidence rate of **5/100,000population²**, down from 6/100,000 the previous week.

Table 1: Summary of cases reported to CTCs in Lusaka District as of 10th February 2018

CTC/CTU	New Cases	Deaths in 24hrs	Current Admissions	Cum. Cases	Cum. Deaths
Kanyama	0	0	0	1173	32
Chipata	1	0	1	1207	27
Matero	0	0	1	508	10
Chawama	5	0	10	460	3
Bauleni	0	0	0	68	0
Chelstone	0	0	0	82	2
Heroes	7	0	7	259	1
Total	13	0	19*	3757	75

*2 paediatrics and 17 adults

- Cholera cases reported from outside Lusaka District:**
 - There were **two (2) new cases** reported, 1 from Shibuyunji and 1 from Chongwe.
 - There were **no cholera deaths** reported in the last 24 hours
 - There were 3 patients under treatment; no patients had been discharged
 - The cumulative number of cases from other districts is 266³. There have been 8 deaths recorded over the course of the outbreak.
- Country wide:** the cumulative number of cases recorded is **4,023 with 83 deaths**

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

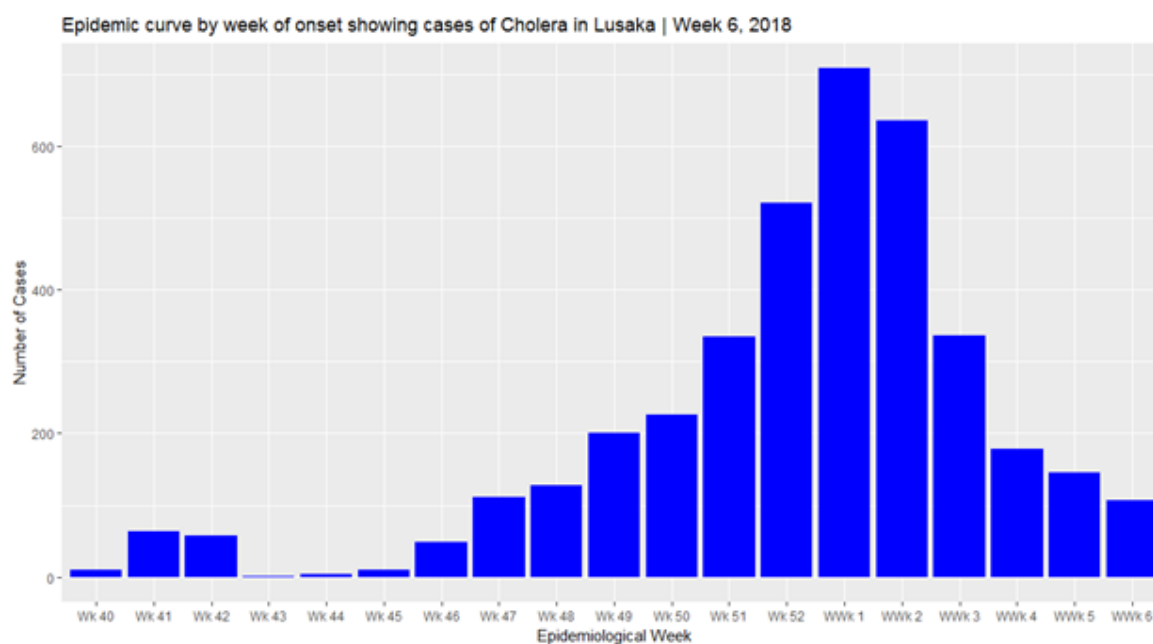
¹ Changes in cumulative figures are due to ongoing reclassification of cases

² 110 new cases and 1 death reported from 4th - 10th February 2018, compared to 140 new cases and 1 death the previous week

³ All 8 cases from Serenje Prison were excluded from the line list following negative culture results.

	Sub-district (total new cases)	Cases by Area of Residence (# of cases)
1	Chawama (2)	Misisi (1), Old Chawama(1)
2	Matero (2)	Lusaka West (1), George (1)
3	Chipata (4)	Old Ngombe (2), Garden Kanele (1), Chipata (1)
4	Chelstone (3)	Chainda (3)
5	Bauleni (2)	State Lodge (2)

Figure 1: Epidemic curve showing cases of cholera in Lusaka district by week of onset (week 6)



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 bout 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 ministerial meeting to coordinate water, sanitation and resources being channelled to the response.
- Further, the minister hosts an update meeting, co-chaired by the Minister of Local Government, the Minister in the Office of the Vice President and the Minister of Water Development, Sanitation and Environmental Protection every Friday.
 - 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 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 Government of Zambia continues to draw resources from its treasury to support the response; supply of ‘free’ clean and safe water, waste management, health promotion and clinical management.

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.

3.3 Zambia National Public Health Institute

- The Zambia National Public Health Institute holds technical committee meetings every Monday, Tuesday and Wednesday.

4. ACTIONS TO DATE

4.1 Oral Cholera Vaccine Campaign

- The second round of the vaccination campaign commenced on **Monday 5 February 2018**, in

Chawama and Kanyama.

- The OCV Round 2 schedule for other areas will be communicated in due course
- 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: Summary of Round 2 immunisation coverage at close of Day 5 (09/02/18)

Sub-district	Target Population*	Daily achieved	Total vaccinated	Coverage
Chawama	238,807	15,723	116,065	49%
Kanyama	242,302	36,368	204,567	84%
Total	481,109	52,091	320,632	67%

*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 in Kanyama, Chawama, Matero, and Chipata
 - To date, 295 patients have left the CTCs against medical advice
 - Interventions including contact tracing, chlorine distribution and water sampling continue to be 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 Cholera Referral Centre to cover the southern population of Lusaka district. 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. To date, Bauleni, Chawama, Kanyama, Matero and Chipata staff have been trained. CDC in collaboration with the ZNPHI have produced jobs aids detailing the case definition and treatment plans. Flow charts for assessment, transfer criteria and discharge criteria have also been 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. Cumulatively, 447 patients have been seen. Medical, psychosocial, nutritional treatments and laboratory services have been offered successfully.

4.3 Laboratory:

- **FDCL Daily Report**
 - Out of 1934 water samples analysed to date; 648 (33.5%) were positive for fecal coliforms.
 - Out of 111 food samples analysed to date, 31 (27.9%) were positive for fecal coliforms.
 - Out of 534 swabs analysed to date; 132 (24.7%) were positive for fecal coliforms.
- **UTH Bacteriology Laboratory Report**
 - 781 cumulative samples have been processed by the laboratory since 4/10/17; **265 (33.9%)** have been culture positive for *Vibrio cholerae* 01 Ogawa; 8 (1%) for *Salmonella*; and 7 (1%) for *Shigella*. There were 23 pending results.
 - Antibiotic susceptibility testing of 5 key drugs has been done on 95 isolates to date. Only one resistant isolate has so far been recorded.

4.4 Environment and WASH interventions:

- **Defense**
 - Burying of shallow wells, and solid waste management including garbage collection and disposal is on going
- **LWSC preparedness and response activities:**
 - **Delivery of water by Bowser:** Three upgraded drawing points were introduced at Lumumba and two at Mass Media. This has reduced the turnaround time of bowsers.

There were 39 bowsers in service. Deliveries decreased to 2,678,000L (from 2,724,000L delivered the previous day); most tanks still had water from the previous day.

- **Repair of installations:** 14 vandalised taps and leaks in Chazanga and Makeni villa were repaired
- **China Civil Engineering Company and SINOMINE** have been contracted for emergency development of water supply networks
- **A dedicated call centre** has been set up to receive complaints regarding sewer blockages (0973271082; 0973254528; 0956343156)

4.5 Health Promotion and Communications

- Community Based Volunteers (CBVs) from CHAZ/OXFAM/Red Cross have been deployed; UNICEF is supporting 200 CBVs in Kanyama and Chawama for the next 3 months
- 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 open 24/7. A total of 129 successful, 81 unsuccessful and 152 missed calls were recorded.
 - The Ministry of Health has been assigned 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/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

➤ LWSC

- Some tanks are inaccessible due to deteriorating condition of roads following the rains
- Children having access to the taps has resulted in damaged taps

- Carrying capacity of International School/Lukasu Road sewer line is overstretched during the rainy season resulting in overflow.
- Costly nature of water delivery by bowser

6. Priority actions & Recommendations

- Case management:
 - Training and continuous mentorship of CTC staff
- LWSC
 - Construction of a by-pass line on the International School/Lukasu Road sewer line to provide relief to the overstretched line
 - Continued delivery of water by bowser 24/7
 - A residual chlorine level of 0.5mg/L in all supplied water to be maintained
- Health Promotion and Communication:
 - Continued engagement and sensitization of communities on hygiene practice and prevention of cholera

7. Conclusion

The downward trend in reported cases has continued, with a further decrease in the total number of cases recorded over the past week, from 140 cases the previous week to 110 this week.

Provision of safe water, contact tracing, environmental investigations, and health promotion activities will continue to be implemented in all areas, and scaled up where necessary



Annex 1: Map of Zambia showing country wide picture of cases reported to date

