

### Situational Report No. 124

<b>Outbreak Name:</b> Cholera	<b>Investigation start date:</b> 4 <sup>th</sup> October, 2017
<b>Date of report:</b> 12 <sup>th</sup> February, 2018	<b>Prepared by:</b> MOH/ZNPHI/WHO

## 1. SITUATION UPDATE

- Lusaka District:** As of 06:00hours today Monday 12<sup>th</sup> February, 2018, there were **24 new cases (3 paediatrics and 21 adults)**; there were **no cholera deaths** recorded in the last 24 hours.
  - There were 31 patients under treatment; 14 patients had been discharged
  - Cumulative cases for Lusaka district now stand at **3,791 with 75 deaths**
  - Based on the most recent statistics, the case fatality rate of the current outbreak is **1.98% (facility CFR=0.77%)** with a weekly incidence rate of **5/100,000population<sup>1</sup>**, down from 6/100,000 the previous week.

Table 1: Summary of cases reported to CTCs in Lusaka District as of 12<sup>th</sup> February 2018

CTC/CTU	New Cases	Deaths in 24hrs	Current Admissions	Cum. Cases	Cum. Deaths
<b>Kanyama</b>	2	0	0	1176	32
<b>Chipata</b>	1	0	1	1208	27
<b>Matero</b>	0	0	1	509	10
<b>Chawama</b>	4	0	9	468	3
<b>Bauleni</b>	0	0	0	68	0
<b>Chelstone</b>	2	0	0	84	2
<b>Heroes</b>	15	0	20	278	1
<b>Total</b>	<b>24</b>	<b>0</b>	<b>31*</b>	<b>3791</b>	<b>75</b>

\*4 paediatrics and 27 adults

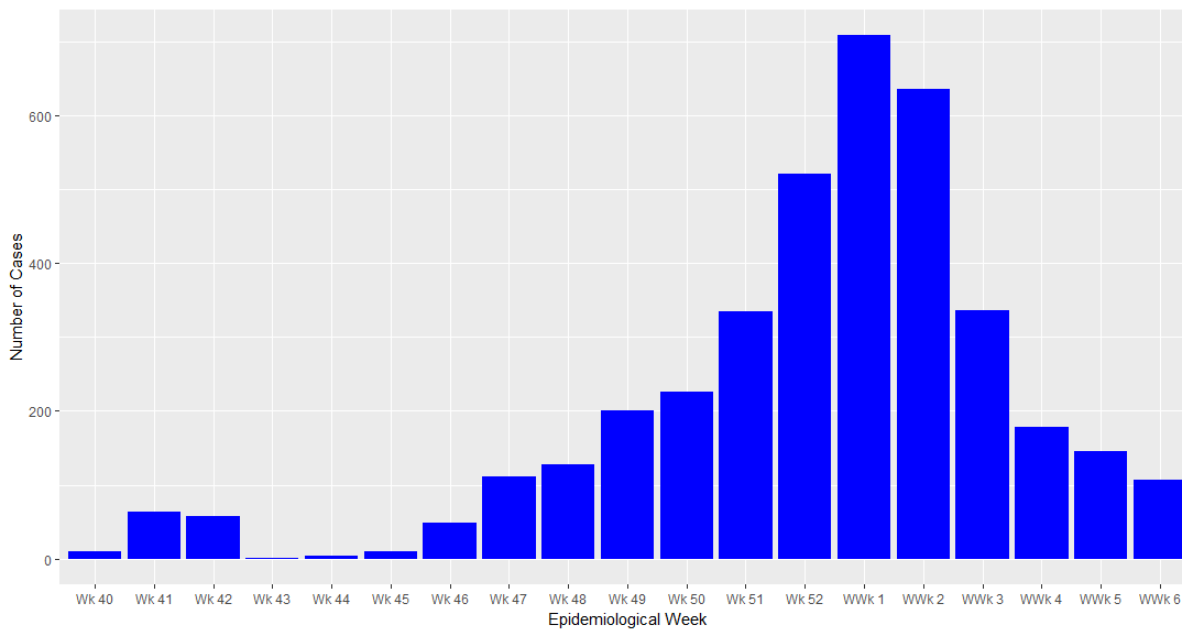
- Cholera cases reported from outside Lusaka District:**
  - There were **no new cases** reported from other districts
  - There were **no cholera deaths** reported in the last 24 hours
  - There were 8 patients under treatment, all in Shibuyunji; 2 patient had been discharged
  - The cumulative number of cases from other districts is 273. There have been 9 deaths recorded over the course of the outbreak.
- Country wide:** the cumulative number of cases recorded is **4,064 with 84 deaths**

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

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

	Sub-district (total new cases)	Cases by Area of Residence (# of cases)
1	<b>Chawama (2)</b>	Jack (1), Intercity (1)
2	<b>Matero (5)</b>	George (5)
3	<b>Chipata (1)</b>	Chipata (1)
4	<b>Chelstone (8)</b>	Avondale (1), Kaunda Square (2), Chainda (5)
5	<b>Kanyama (5)</b>	Chibolya (1), John Laing (4)
6	<b>Chilanga (3)</b>	Maloni (3)

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



## 2. BACKGROUND

The outbreak was declared on 6<sup>th</sup> 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 4<sup>th</sup> October, 2017. Kanyama reported the first suspected case of cholera on 8<sup>th</sup> 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 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 World Health Organisation facilitated and provided resources supplementing the Government's efforts to procure the Oral Cholera Vaccine (OCV)
- Round one of the OCV campaign launched on 10<sup>th</sup> January 2018 successfully recorded 109% coverage with 1,317,925 people vaccinated. The vaccination included 1,407 doses of the vaccine were given to inmates at Lusaka Central Prison
- 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 7 (11/02/18)

Sub-district	Target Population*	Daily achieved	Total vaccinated	Coverage
<b>Chawama</b>	238,807	40,370	196,005	82%
<b>Kanyama</b>	242,302	51,662	302,125	125%
<b>Total</b>	<b>481,109</b>	<b>92,032</b>	<b>498,130</b>	<b>104%</b>

\*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 from Kanyama, Chawama, Matero, Chipata, Chelstone and Chilanga
  - 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  $\geq 3$  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, as of 7<sup>th</sup> February 2018, 447 patients had been seen. Medical, psychosocial, nutritional treatments and laboratory services have been offered successfully.

### 4.3 Laboratory:

- **FDCL Daily Report (7<sup>th</sup> February 2018)**
- 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 (24.77%) were positive for fecal coliforms.
- **UTH Bacteriology Laboratory Report (3<sup>rd</sup> February 2018)**
- 816 cumulative samples have been processed by the laboratory since 4/10/17; **272 (33.3%)** have been culture positive for *Vibrio cholerae 01 Ogawa*; 8 for *Salmonella*; and 7 for *Shigella*. There were 38 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 36 bowsers in service. Deliveries increased to 3,208,000L (from 1,820,000L the previous day). Of the 285 tanks sampled during a spot check, in 2 of 5 in Kalingalinga, 2 of 9 in Mtendere, 1 of 23 in Chawama and 1 of 2 in Madimba were empty.
- Tanks were empty for failure to deliver due to impassable roads caused by heavy rains; tank empty in Chawama was newly installed and awaiting concrete to cure.
- **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 139 successful, 58 unsuccessful and 76 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 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

- Some tanks are inaccessible due to deteriorating condition of roads following the rains
- 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
- Overflowing drainages

## 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; excavations are 90% complete. Works are expected to be completed by 21<sup>st</sup> February 2018
  - 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. All interventions must be escalated including provision of safe water, water & food sampling, testing & certification of food handlers, contact tracing, Inspection of public



Ministry of Health



facilities, disinfection of sanitation facilities in poor condition, and health promotion activities.





Annex 1: Incidence rate of Cholera cases in Lusaka district up to week 6, 2018

