

OUTBREAK REPORT

Summary report of cholera outbreak in Lusaka district as of 18th December 2017

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Introduction

The following is an epidemiological summary of data extracted from the Ministry of Health's integrated disease surveillance and response (IDSR) system for the period 4th October 2017 to December 2017. The Zambian ministry of health declared a cholera outbreak in Lusaka on 4th October 2017.

Methods

The data used was extracted from the Ministry of Health's integrated disease surveillance and response (IDSR) system

at the Zambia National Public Health Institute (ZNPHI), covering the period 4th October to 18th December 2017. An epidemic curve by week of alert was constructed for immediate notifications received in R statistical software using the *epitools* package. Only immediate notifications were included to determine the temporal pattern of cholera outbreaks during this period. To determine the spatial distribution of cholera cases, point location of cholera alerts over the period of interest were plotted in quantum GIS (QGIS). Descriptive statistics of the other variables

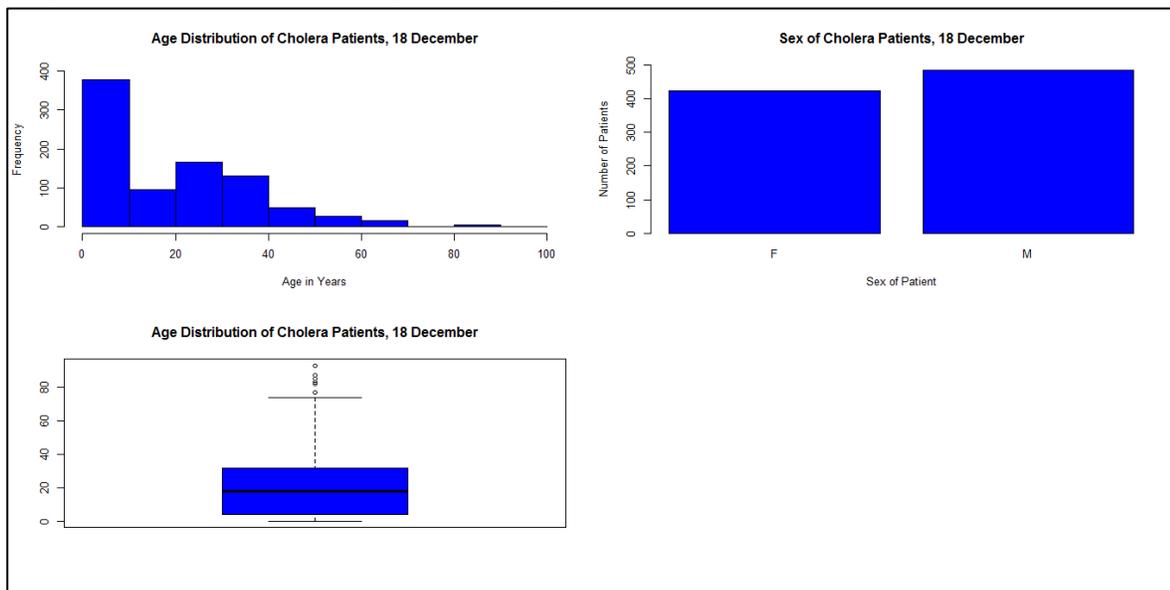


Figure 1 Age and Sex distribution of cholera patients, 18th December 2017

Table 1 Distribution of cholera cases in Lusaka sub-districts as of 18th December 2017

SUB-DISTRICT	BAULENI	CHAWAMA	CHELSTONE	CHILENJE	CHIPATA	KANYAMA	MATERO	TOTAL
CASES RECORDED	6	15	1	1	548	256	81	908

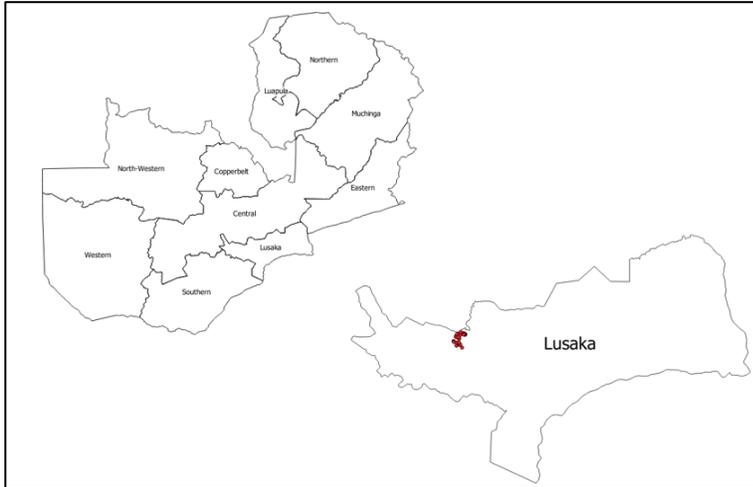


Figure 2 Spatial pattern of cholera cases for the period October to December 2018 (Provincial boundaries also shown).

Epidemic curve showing case notifications on Cholera, provided by Ministry of Health Lusaka sub-districts through the IDSR for the period 4 October through to 18 Dec 2017

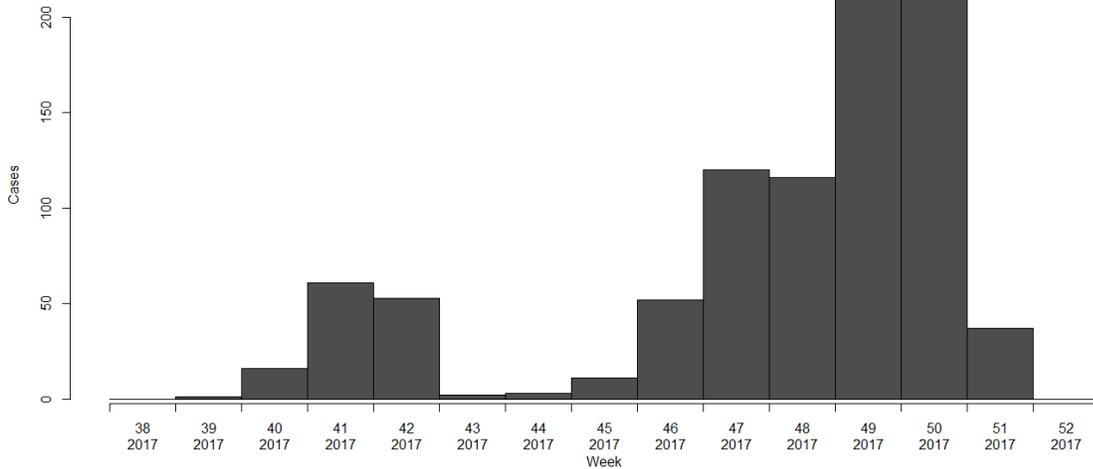


Figure 3 Epidemic curve of Cholera cases provided by MoH Lusaka sub-districts through the IDSR for the period 4th October to 18th December 2017 (weekly notifications).

were carried out, and results have been reported in this analysis.

Results

A total of 908 notifications were received during this period. Table 1 shows the distribution of cases recorded by sub-district in Lusaka district. Figure 1 shows the demographic characteristics of cholera patients in Lusaka district. The average age of patients was 20 years. There were 423 female patients and 485 male patients. Figure 2 shows the spatial distribution of cholera cases in Lusaka province. Majority of cases fall in Chipata sub-district of Lusaka district. The analysis further showed two epidemic waves of cholera with the second wave still rising (Figure 3). Among the country alerts, the highest were from Chipata sub-districts with 548 cases.

Summary

The cholera outbreak in Lusaka is still on going. At the time of authoring this report, there were a total of 50 new cases (Figure 3, week 51) and 75 cases under treatment. Statistics further indicate that 2.63% of cholera cases result in death. The main driver of the outbreak is the use of water drawn

from shallow wells for everyday household use and drinking. Microbiological analysis of this water has found that it is contaminated with cholera causing germs. Control measures put in place include the provision of clean and safe water to affected communities for free, distribution of chlorine to households, burying of shallow wells, health information through print and electronic media as well as the setting up of an information management system IMS both centrally (ZNPPI) and in the affected sub-districts. The national public health emergency operation system (PHEOC) at ZNPPI is in partial activation mode in view of the current outbreak. While cases outside Lusaka district have been recorded, these have all been epidemiologically linked to the Lusaka outbreak. All cases outside Lusaka have been contained and there is no evidence of further outbreak propagation

Further Resources

The Zambia National Public Health Institute will be publishing daily situation reports (SitReps) on the ongoing outbreak. The SitReps can be accessed online on [The Health Press Zambia website](#).