

# 20<sup>th</sup> AfWA International Congress and Exhibition 2020

## Breaking new grounds to accelerate access to water and sanitation for all in Africa

# SANITATION MAPPING FOR EMERGENCY SITUATIONS

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# Introduction



- Cholera broke out in Zambia's capital, Lusaka from September 2017 to March 2018
- Over 3500 cholera cases recorded, with an average case fatality of about 2%.
- The outbreak was more endemic in the Peri Urban Areas (PUAs) of Kanyama and Chipata.
- The Kanyama spatial sanitation data, was useful in rapid response and decision making during the fight against the Cholera outbreak.



# Objectives



- ❑ To combat the cholera outbreak using sanitation mapping data.
- ❑ The spatial sanitation data was very useful in implementing some of the rapid cholera response activities, especially desludging of sanitation facilities, water sampling, burying of shallow wells, clearing of illegal waste dumpsites and provision of alternative safe drinking water.
- ❑ The multi-sectoral rapid response activities and interventions included: establishment of cholera treatment centers; contact tracing; health promotion; water sampling; disinfection and desludging of pit latrines and septic tanks; waste disposal management; provision of alternative safe drinking water and treatment of water sources



# Approach



Location coordinates for reported cholera cases were picked and superimposed with the sanitation data for spatial analysis. The following interventions were instituted:

- **Water Sampling & Treatment**
- **Desludging of Sanitation Facilities**
- **Burying Shallow Wells**
- **Clearing of Dumpsites**
- **Provision Alternative Drinking Water Sources**
- **Disinfection of Stagnant Water**
- **Disinfecting of affected homes**

A multisectoral cholera committee was formed to report on new cholera cases.

Maps were generated to give scenarios of spread of the cases and the existing sanitation facilities.



# Some Pictures



# Some Results



Intervention	Results	Comments
Desludging	306 Latrines Emptied out of 429 targeted in Kanyama	All the pits emptied under enforcement.
Installation of Water Tanks	About 300 Water Tanks were installed	Water delivery was a challenge due to poor road access.
Burying of Shallow Wells	Over 500 shallow wells were buried in Kanyama	Not easily identified. HH concealed the wells due to lack of reliable water sources

# Outcomes



- It was easy for stakeholders to respond rapidly to the cholera outbreak and make informed decisions on the relevant interventions.
- Execution and implementation of the response programs was effective and targeted.
- Overall, the multisectoral and multi-disciplinary approach with the use of sanitation data was instrumental in ensuring the outbreak was mitigated timely with minimal death occurrences.



# Lessons Learnt



- Comprehensive up to date sanitation data can be very useful in planning and execution of emergency situation rapid response interventions.
- Sanitation data for PUAs can become outdated very fast; hence it requires regular updating and database management if it is to remain relevant in the long term.
- Positive efficient public health enforcement by local authorities requires well setup information and data management systems, enough field personnel and resources

# Next Steps



- Extension of the mapping exercise to the other remaining seweraged and non-seweraged areas in Lusaka to develop a city-wide sanitation database under the BMGF CWIS grant being managed by the utility (LWSC).
- The sanitation data will be integrated in the existing institutional data systems at LWSC and LCC as well as the envisioned call center which will be established under the LSP for sustainable database management to prevent the data becoming obsolete with time.
- Digitization of the standard operating procedures for the Public Health Department (LCC) for smart enforcement and easy sanitary inspections.



# THANK YOU

