GTFCC Cholera Guidance: Tool to align testing strategy for Malawi

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Importance and principles of cholera surveillance

- Cholera is acute diarrheal disease caused by ingestion of *Vibrio cholera* serogroup O1 or O139.
- Short incubation period may lead to exponential rise in cases during outbreaks.
- Disproportionally impacts poorest and most vulnerable populations.
- Should be integrated into a country's existing national public health surveillance system

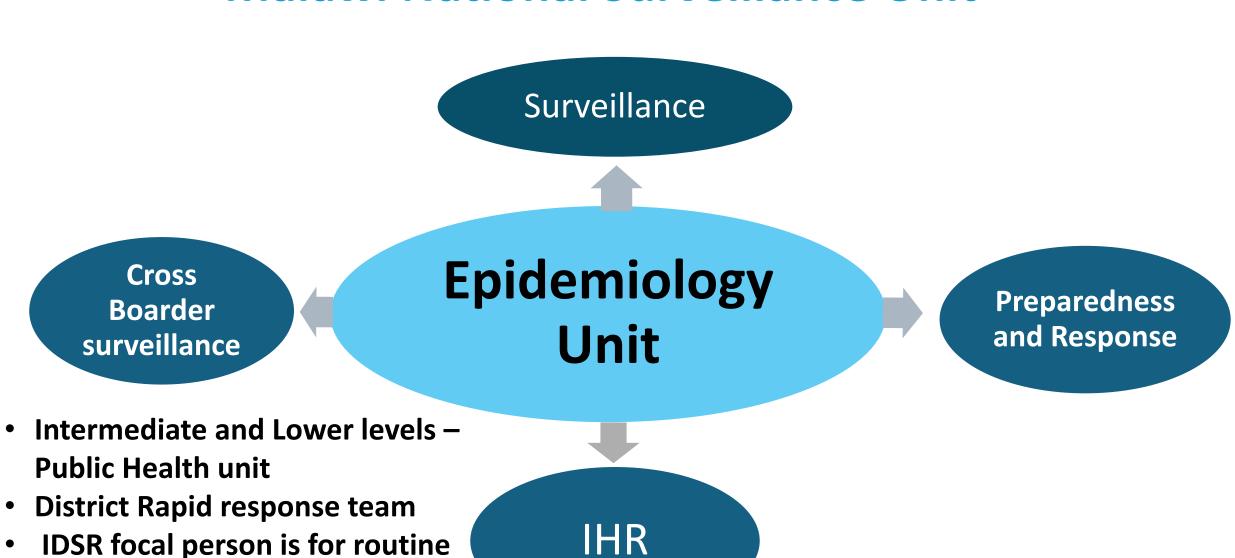
Cholera Situation in Malawi

- First outbreak in Malawi 1973
- Since 1998, Cholera has been endemic in Malawi with seasonal outbreaks in the southern region; prone to floods.
- The 2022 cholera outbreak was the worst so far that extended through the dry season.

 Cyclones; floods, lack of access to safe water, sanitation, and hygiene.



Malawi National Surveillance Unit



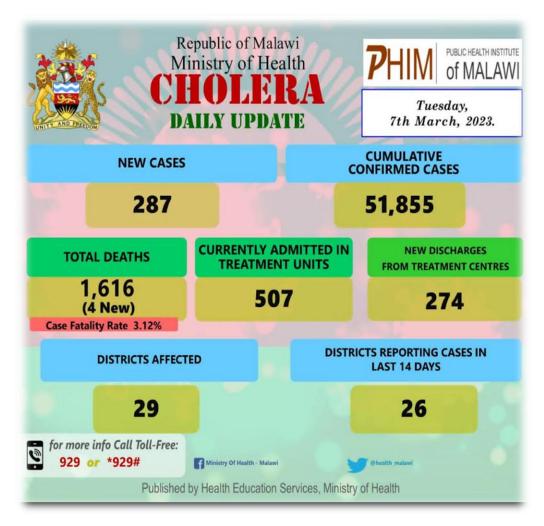
reporting

Surveillance objectives

 Deeper insights into the epidemiological patterns of cholera in Malawi

 Ongoing data collection and analysis, and situation reports are being produced and published regularly.

 Real time reporting and public updates to inform public health interventions

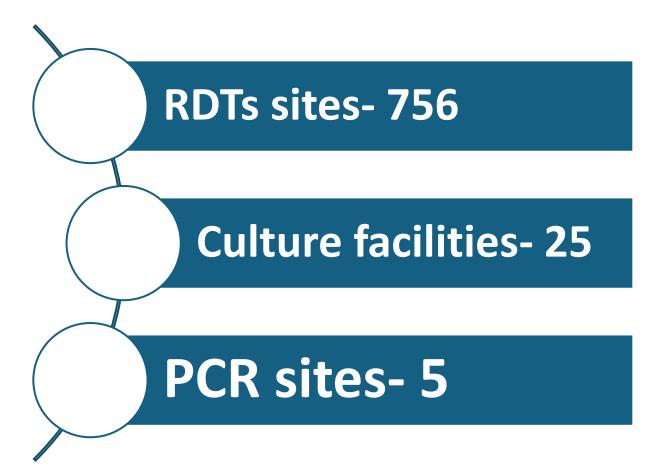


Testing Methods

 Rapid Diagnostic Tests (RDTs)screening tool, non – confirmatory

 Culture- Diagnostic tool for confirmation of VC01/0139

 Polymerase Chain Reaction (PCR)-Diagnostic tool for confirmation of VC01/0139



Implementation/planning of use of RDT deployed through GAVI

- Expansion of health facilities to be screening for suspects of cholera.
- Received 9520 cholera test kits as of the end of March 2024.
- Distributed 320 cholera test kits to hot spots across the country.
 - Currently distribution is on demand since cases have gone down
 - Some hot spot districts are still reporting cases on daily basis
 - Distribution to all health facility in the country in readiness of the next coming rainy season planned for October

Suspected cholera case in a surveillance unit where there is no probable or confirmed cholera outbreak

Cholera case definitions (absence of an outbreak)

A person aged two years and older:

 with acute watery diarrhoea and severe dehydration

or

 who died from acute watery diarrhoea with no other known cause of death.

Cholera case definitions (during an outbreak)

Suspected cholera case in a surveillance unit where there is a probable or confirmed cholera outbreak

 Any person with or dying from acute watery diarrhoea.

Confirmed cholera case in a surveillance unit where there is no confirmed cholera outbreak

 Any person infected with Vibrio cholerae O1 or O139 confirmed by culture/seroagglutination or PCR.

Suspected cholera outbreak definition tailored to Malawi

- One suspected cholera case with a positive RDT result (RDT+):
 - Trigger cholera alert,
 - Communicate with the next level; through Phone, WhatsApp,
- Specimen is referred to a culture testing laboratory for confirmation.
- Cholera outbreak -At least one confirmed cholera case locally acquired.
 - Confirmed by culture or PCR
- Probable outbreak is when an RDT test positive of a Suspect outbreak

Cholera testing during outbreaks tailored to Malawi

 All suspected cholera cases are screened with RDT to the areas where it has not been confirmed using culture

 When an outbreak is declared in an area- test 5-10 suspected cases within 5 days of onset of acute watery diarrhea

Outbreak escalated- every week 5 samples are tested

Cholera testing strategy in Malawi

samples are are confirmed by laboratory test through culture. Positive culture = confirmed cholera

Outbreak escalatedtest 5 samples every week to monitor if Vibrio cholera is still circulating

All suspected cholera cases are tested via RDT when culture is not available.

When an outbreak is declared in an areatest 5-10 suspected cases within 5 days of onset of acute watery diarrhea

Cholera reporting system in Malawi...

Cholera surveillance is integrated into IDSR.

World Health Organization

National Level

The intermediate facilities collects and analyses data for the district

Intermediate/ district level



Community- Evidence based surveillance

Reporting is weekly and monthly using phone calls, WhatsApp,
Reporting tools soft copy)
WHO is through updates

Notification is immediate or within 24 hours

Challenges with Cholera surveillance in Malawi

- Surveillance data collecting tools for surveillance (Line list) not interfaced with Laboratory data (LIMS)
- Patient information data not completely filled/collected
- Support for deliver of RDTs is mostly not available
- Periodically monitor and verify the testing procedures in the facilities
- Specimen referral for confirmation is a challenge.

Acknowledgements

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