

# **6<sup>th</sup> GLOBAL TASK FORCE MEETING**

**CHOLERA PRESENTATION**

**MALAWI**

**26<sup>th</sup> September 2023**

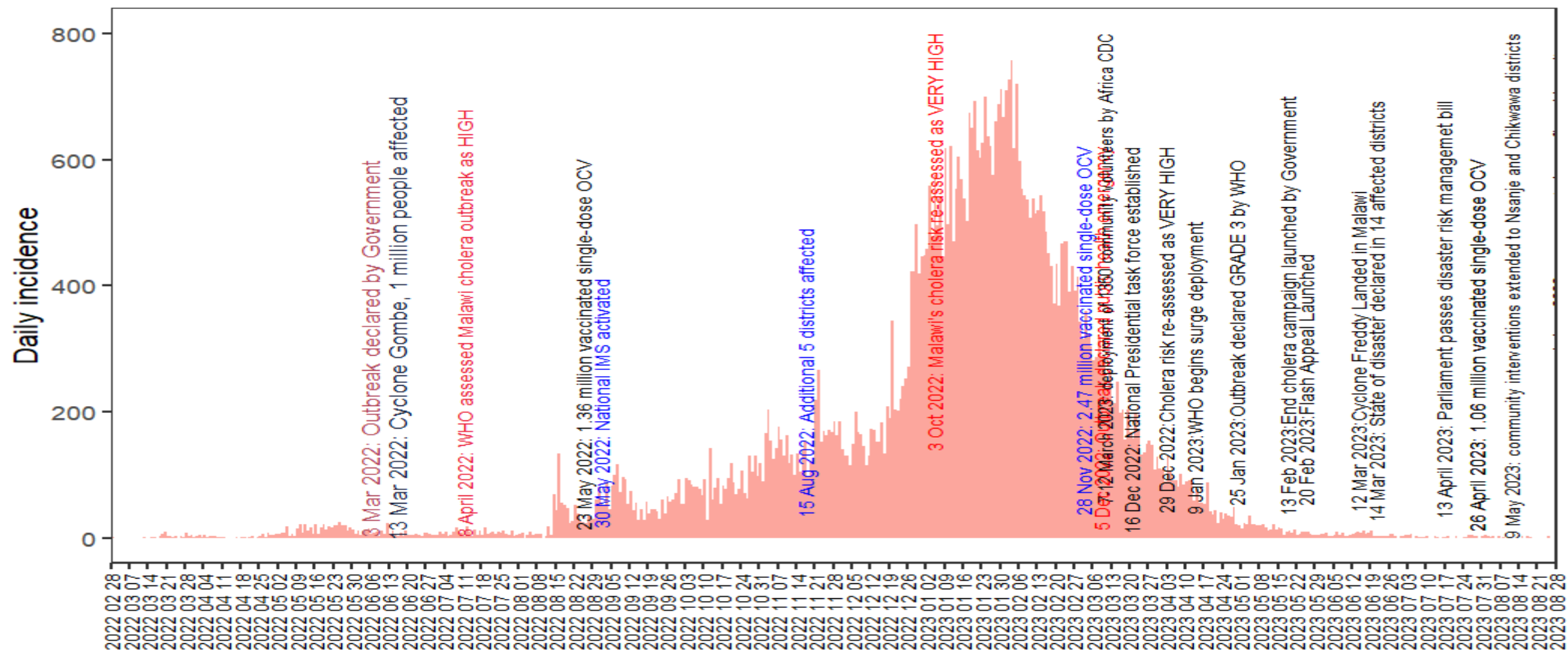
# History of Cholera in Malawi

- Malawi's first cholera outbreak occurred in 1973, triggering a significant epidemic.
- Subsequent outbreaks of varying sizes have since occurred, with the highest reported cases during the 1998/99 and 2001/2002 rainy seasons, reaching 25,000 and 33,546 cases respectively.
- From 1998 onward, cholera outbreaks have become nearly an annual event in Malawi, spanning from November 1st to October 31st of the following year, often characterized by peak periods.

# Daily incidence of cholera cases in Malawi, 28 Feb 2022 – 17 September 2023

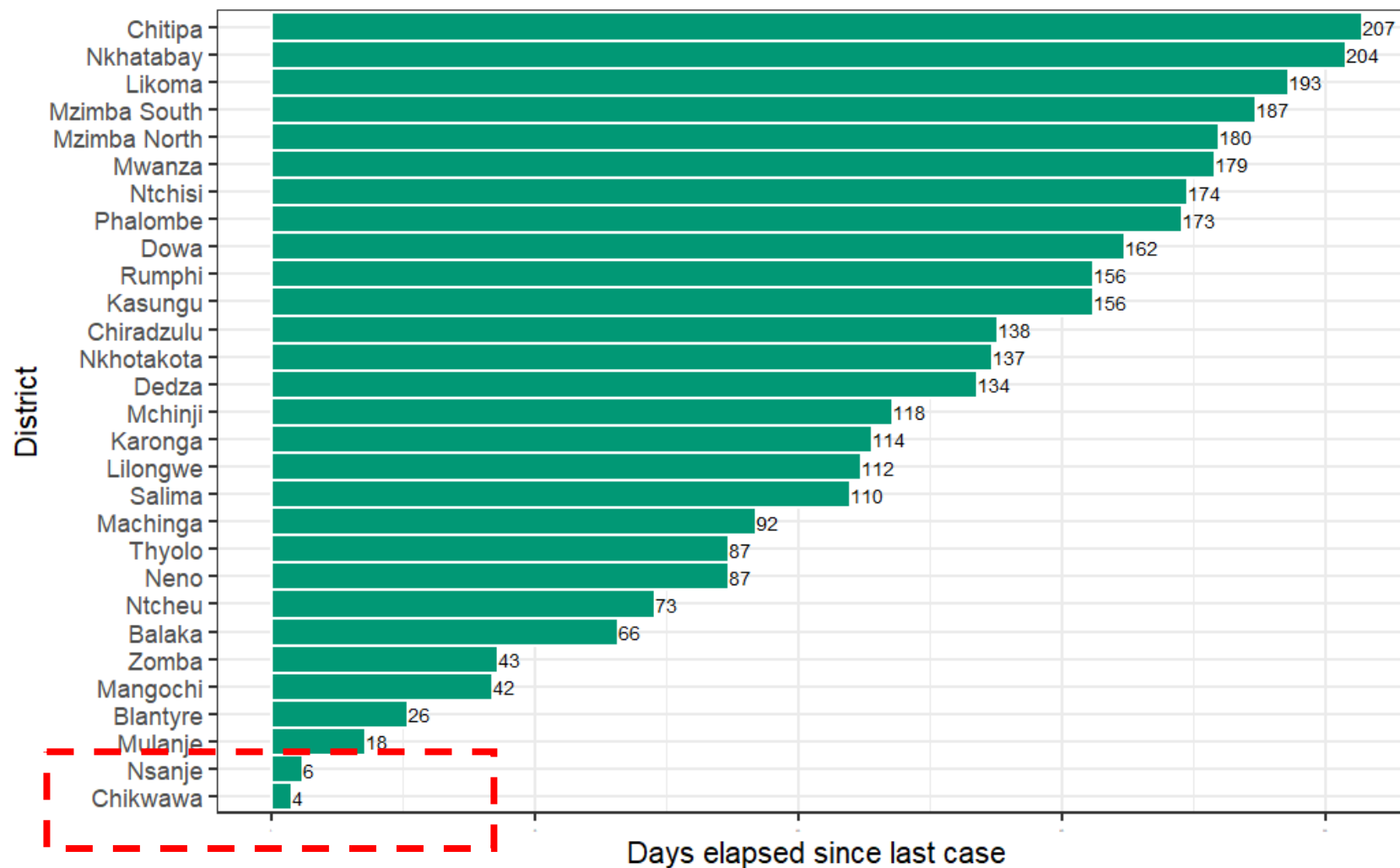
NATIONAL RISK LEVEL	SCALE(GEOGRAPHICAL SPREAD)	SEVERITY	VULNELABILITY	POPULATION AT RISK	COPING CAPACITY	REPUTATIONAL RISK	GRADE
	ONE OR MORE DISTRICTS	LOW	LOW	<0.01%	HIGH	LOW	1

**CASES: 58 996 | DEATHS 1 768 | CFR:3.0%**



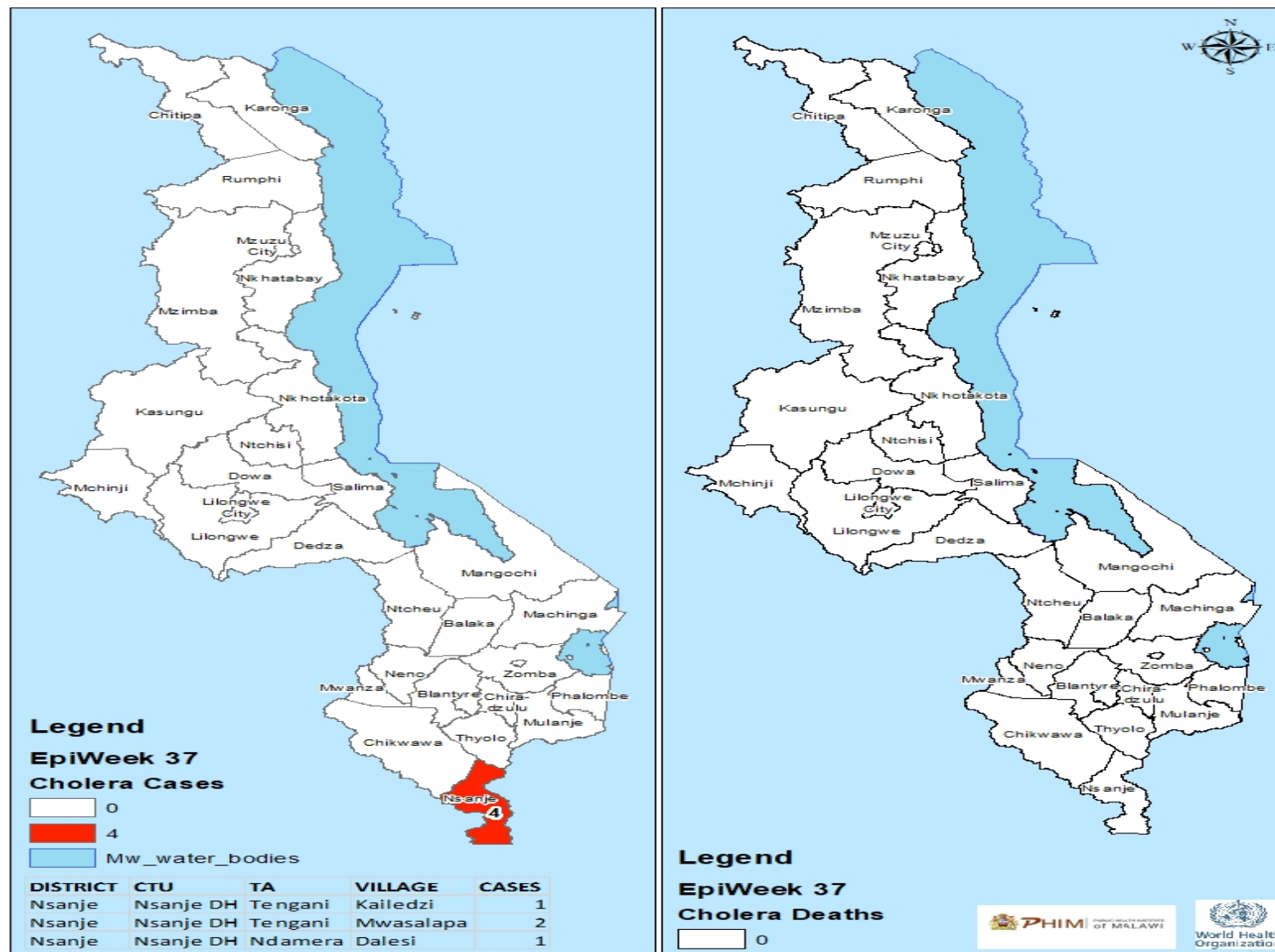
## Districts reporting cases in Malawi in the past 14 days, 11 - 17 September 2023

Chikwawa, and Nsanje districts still reporting cholera cases



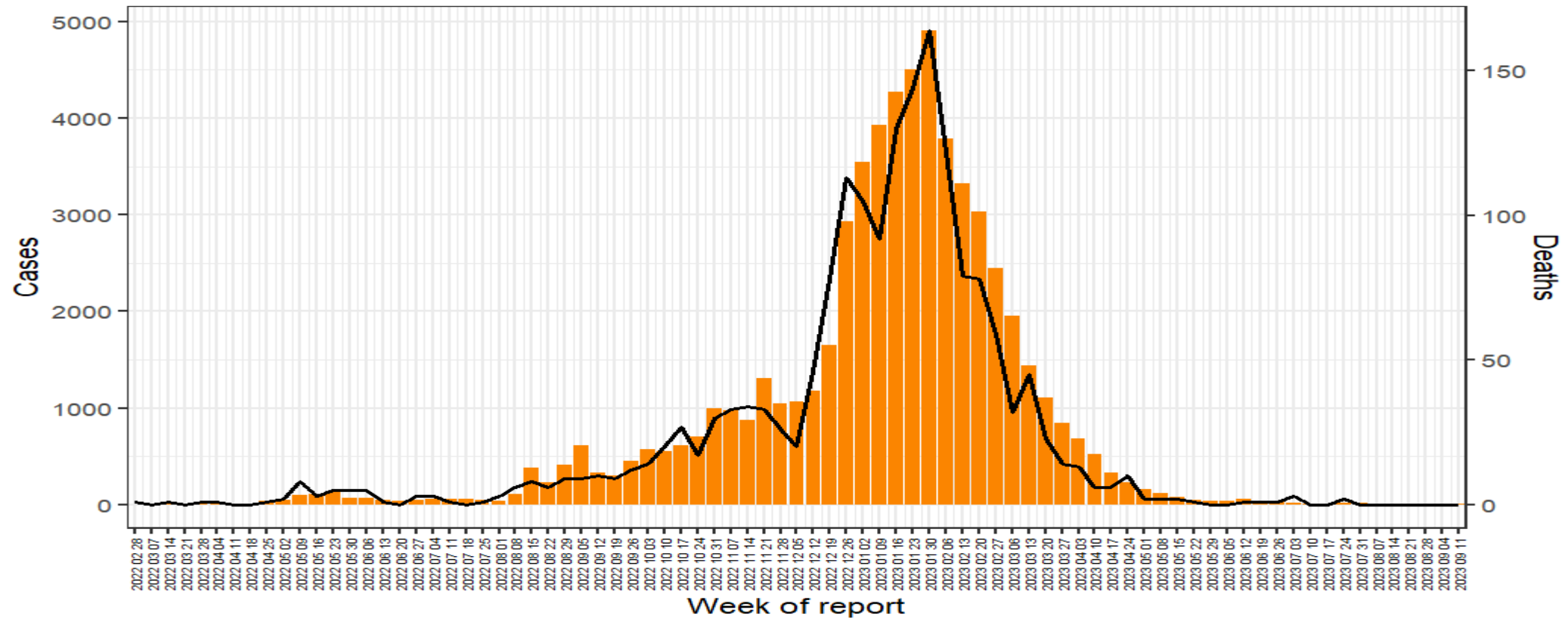
# Districts reporting cases in Malawi, 04 - 17 September 2023

4 cases for Nsanje  
but no death



## Weekly incidence of cholera cases and deaths in Malawi, up to 17 September 2023

➤ While we had 7 new confirmed cases but zero deaths now 7 weeks



# *INTERVENTIONS FOR CHOLERA RESPONSE*

- Surveillance and cross-border monitoring plus Lab strengthening
- Enhancement of Water and Sanitation activities
- Health Promotion activities plus RCCE “**Tithetse Cholera campaign**” with the State President Launch
- Immunization OCV vaccine

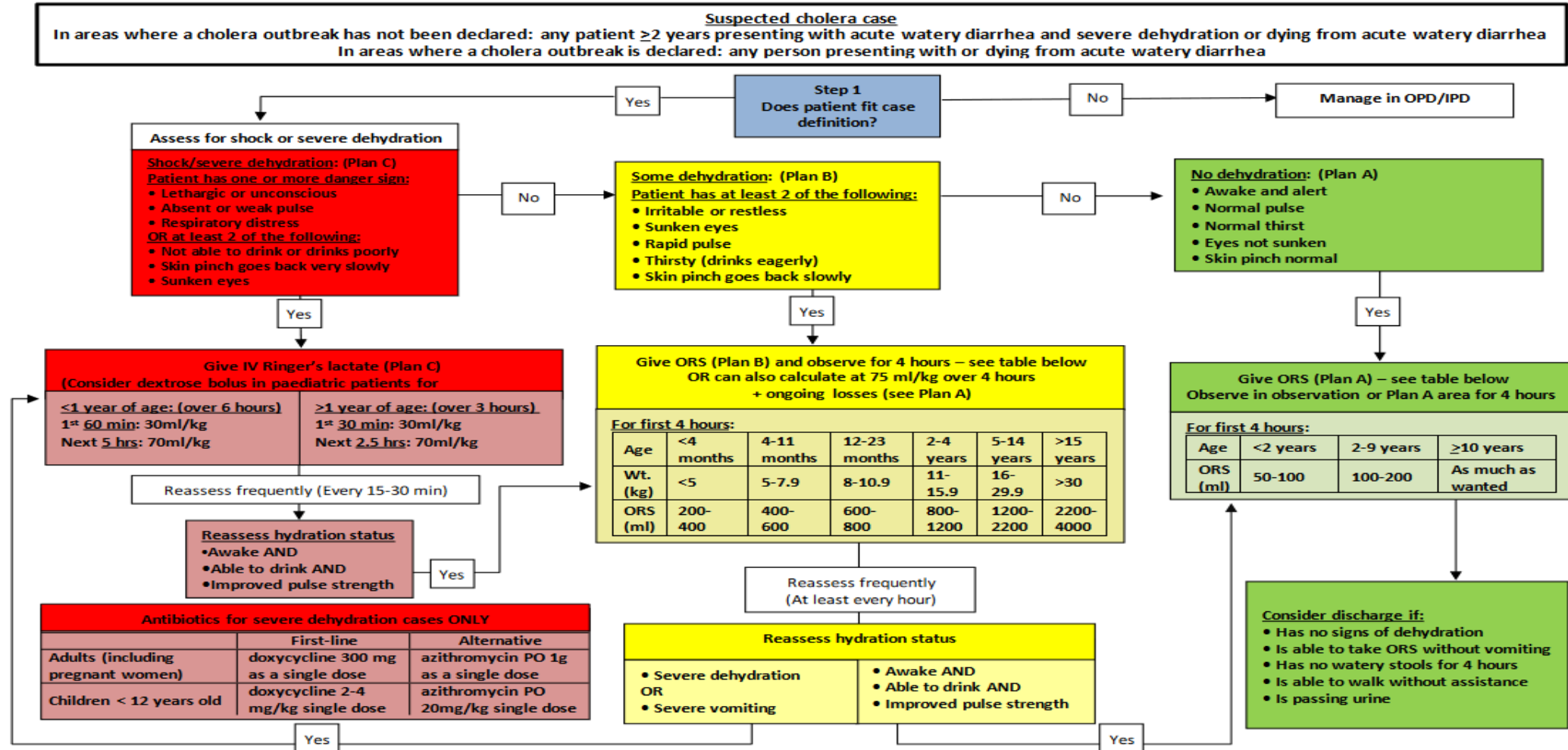
# Reactive Campaigns

- The first campaign was conducted in May 2022 with overall coverage of 70 %.
- The second campaign was conducted from 7 November 2022 to January 13, 2023, with an overall coverage of 97.6 %.
- Another campaign was conducted in April to May 2023, with overall coverage of 74.5%.
- A recent OVC campaign was conducted, August 2023, with a overall coverage of 103%.



# Clinical Case Management

Flow chart for cholera case management



## Appendix 12. Admission and triage form

### 1. IDENTIFICATION

Patient name: \_\_\_\_\_ Admission date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_  
 Age: \_\_\_\_years/months Sex: ☐Male ☐female if female, any possibility of pregnancy? ☐No ☐Yes  
 OCV received: ☐No ☐Yes ☐Don't know if yes, when? \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Address: \_\_\_\_\_ Closest landmark: \_\_\_\_\_

### 2. CLINICAL DATA - Please circle if the patient has any of the following and give the length of time in days

Watery stool x \_\_\_\_days Fever x \_\_\_\_days Bloody stool x \_\_\_\_days  
 Vomiting x \_\_\_\_days When was the last time the patient vomit? \_\_\_\_hours ago  
 When did the illness start? \_\_\_\_/\_\_\_\_/\_\_\_\_ When was the last time the patient urinated? \_\_\_\_hours ago  
 Any known contacts with anyone else with similar symptoms? ☐No ☐Yes Who? \_\_\_\_\_  
 Please list any other symptoms: \_\_\_\_\_

### 3. PHYSICAL EXAM AND DIAGNOSIS

Danger signs	<input type="checkbox"/> Lethargic or unconscious <input type="checkbox"/> Absent or weak pulse <input type="checkbox"/> Respiratory distress	<input type="checkbox"/> No danger signs	
Signs	<input type="checkbox"/> Not able to drink or drinks poorly <input type="checkbox"/> Sunken eyes <input type="checkbox"/> Skin pinch goes back slowly	<input type="checkbox"/> Irritable or restless <input type="checkbox"/> Sunken eyes <input type="checkbox"/> Rapid pulse <input type="checkbox"/> Thirsty, drinks eagerly <input type="checkbox"/> Skin pinch goes back slowly	<input type="checkbox"/> Awake and alert <input type="checkbox"/> Normal pulse <input type="checkbox"/> Normal thirst <input type="checkbox"/> Eyes not sunken <input type="checkbox"/> Skin pinch normal
Treatment Plan	If one or more danger signs OR $\geq 2$ above are checked $\rightarrow$ Severe dehydration (Plan C)	If no danger signs AND $\geq 2$ above are checked $\rightarrow$ Some dehydration (Plan B)	No dehydration (Plan A)

### 4. TREATMENT

	Severe dehydration (Plan C)	Some dehydration (Plan B)	No dehydration (Plan A)								
Treatment	<input type="checkbox"/> IV fluids: Ringer's lactate bolus $<1$ ym: 30ml/kg in 60 min $\geq 1$ ym: 30ml/kg in 30 min Quantity: ____ml over ____min  <input type="checkbox"/> Reassess after bolus If absent/weak pulse $\rightarrow$ repeat bolus Quantity: ____ml over ____min  <input type="checkbox"/> IV fluids: Ringer's lactate bolus $<1$ year: 70ml/kg in 5 hours $\geq 1$ year: 70ml/kg in 2.5 hours Quantity: ____ml over ____hours  <input type="checkbox"/> Reassess hydration after IV fluids -Severe: Repeat IV fluids -Some: ORS (see 'Some' box)  <input type="checkbox"/> Give antibiotics Drug & dose: _____	<input type="checkbox"/> ORS 75ml/kg over 4 hours Quantity: ____ml over 4 hours <input type="checkbox"/> Zinc supplementation (20mg/day) in children 6 months – 5 years  <input type="checkbox"/> Reassess after ORS -Severe: Give IV fluids -Some: Repeat ORS amount -No dehydration: Discharge with ORS	<input type="checkbox"/> After each loose stool, give: <table border="1"> <tr> <th>Age (in ym)</th><th><math>&lt;2</math></th><th>2-9</th><th><math>\geq 10</math></th></tr> <tr> <th>ORS (ml)</th><td>20-100</td><td>100-200</td><td>As much as wanted</td></tr> </table> <input type="checkbox"/> Zinc supplementation (20mg/day) in children 6 months – 5 years	Age (in ym)	$<2$	2-9	$\geq 10$	ORS (ml)	20-100	100-200	As much as wanted
Age (in ym)	$<2$	2-9	$\geq 10$								
ORS (ml)	20-100	100-200	As much as wanted								
Discharge instructions		Consider discharge if: - Has no signs of dehydration - Can take ORS without vomiting - No watery stools for 4 hours - Can walk without assistance - Is passing urine - Has been advised when to return to hospital/CTC - Health messaging completed	Before discharge, check following: <input type="checkbox"/> Health messaging completed <input type="checkbox"/> ORS given for home <input type="checkbox"/> Assure caregiver can correctly mix and give ORS without supervision								

### 1. LABORATORY DATA:

Stool sample taken? ☐No ☐Yes Date taken: \_\_\_\_/\_\_\_\_/\_\_\_\_ Chikera RDT result: ☐+ve ☐-ve ☐Not conducted  
 Stool culture sent: ☐No ☐Yes Date stool culture sent: \_\_\_\_/\_\_\_\_/\_\_\_\_

### 2. OUTCOME:

Date of outcome: \_\_\_\_/\_\_\_\_/\_\_\_\_ ☐Discharged ☐Dead ☐Self-discharged ☐Referred (where:\_\_\_\_\_) ☐Unknown  
 Name of admitting clinician: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Appendix 12. Admission and triage form

1. IDENTIFICATION

Patient name \_\_\_\_\_ Admission date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_:\_\_\_\_  
Age: \_\_\_\_ years/months Sex: ☐ Male ☐ Female if female, any possibility of pregnancy? ☐ No ☐ Yes  
OCV received: ☐ No ☐ Yes ☐ Don't know if yes, when? \_\_\_\_/\_\_\_\_/\_\_\_\_  
Address: \_\_\_\_\_ Closest landmark: \_\_\_\_\_

2. CLINICAL DATA - Please circle if the patient has any of the following and give the length of time in days

Watery stool x \_\_\_\_ days Fever x \_\_\_\_ days Bloody stool x \_\_\_\_ days  
Vomiting x \_\_\_\_ days When was the last time the patient vomit? \_\_\_\_ hours ago  
When did the illness start? \_\_\_\_/\_\_\_\_/\_\_\_\_ When was the last time the patient urinated? \_\_\_\_ hours ago  
Any known contacts with anyone else with similar symptoms? ☐ No ☐ Yes Who? \_\_\_\_\_  
Please list any other symptoms: \_\_\_\_\_

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Danger signs	<input type="checkbox"/> Lethargic or unconscious <input type="checkbox"/> Absent of weak pulse <input type="checkbox"/> Respiratory distress	<input type="checkbox"/> No danger signs	
Signs	<input type="checkbox"/> Not able to drink or drinks poorly <input type="checkbox"/> Sunken eyes <input type="checkbox"/> Skin pinch goes back slowly	<input type="checkbox"/> Irritable or restless <input type="checkbox"/> Sunken eyes <input type="checkbox"/> Rapid pulse <input type="checkbox"/> Thirsty, drinks eagerly <input type="checkbox"/> Skin pinch goes back slowly	<input type="checkbox"/> Awake and alert <input type="checkbox"/> Normal pulse <input type="checkbox"/> Normal thirst <input type="checkbox"/> Eyes not sunken <input type="checkbox"/> Skin pinch normal
Treatment Plan	If one or more danger signs OR $\geq 2$ above are checked Severe dehydration (Plan C)	If no danger signs AND $\geq 2$ above are checked Some dehydration (Plan B)	No dehydration (Plan A)

4. TREATMENT

	Severe dehydration (Plan C)	Some dehydration (Plan B)	No dehydration (Plan A)								
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1. LABORATORY DATA:

Stool sample taken? ☐ No ☒ Yes Date taken: \_\_\_\_/\_\_\_\_/\_\_\_\_ Cholera RDT result: ☒ +ve ☒ -ve ☐ Not conducted

Stool culture sent: ☐ No ☐ Yes Date stool culture sent: \_\_\_\_/\_\_\_\_/\_\_\_\_

2. OUTCOME:

Date of outcome: \_\_\_\_/\_\_\_\_/\_\_\_\_ ☒ Discharged ☐ Dead ☐ Self-discharged ☐ Referred (where: \_\_\_\_\_) ☐ Unknown  
Name of admitting clinician \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_



# Achievements

- Massive reduction in mortality rates
- Health workers are trained and equipped for case management
- Case management resource mobilization is streamlined

# Community Case Management-Oral Rehydration Points

- **Aim-** The oral rehydration points were implemented as a key strategy to curb the high case fatality rate (CFR) during the 2022-2023 Cholera outbreak.
- The CFR remained at 3% which is higher than the recommended WHO CFR of 1%.
- **Case definition-** The definition of Cholera at the ORP is occurrence of 2 or more loose stools in 24 hours.
- All patients at ORP sites are deemed **Cholera suspects** as volunteers cannot diagnose Cholera patients.
- **Referral pathway-** Under five children, pregnant women, moderate as well as severe cases were referred to the CTU/CTC.
- All mild cases were managed at the ORP.
- ORP's are manned by community volunteers and directly supervised by the health surveillance assistant (HSA). ORP's fall under the case management pillar.
- **ORP kits-** All logistics covered by the partner. The ORP kit consisted of a minimum package of buckets, HTH, ORS, Aqua tabs, handwashing and washing soap, waste disposal plastic, PPE (gloves, heavy duty gloves, aprons, masks), cups, SOP/s and writing materials.

# Pilot

- ORP's were initially rolled out in 10 high burden districts during the Cholera outbreak (January 25<sup>th</sup>- February 21<sup>st</sup>) 2023.
- As of now, there are over 270 ORP's that were implemented in 270 hotspots across 17 districts.
- Over 17000 patients have patronized the ORP's across the country.
- Swiss Red Cross, Malawi red Cross, Unicef, World Health Organization (WHO) and IsraAid were the main partners funding the implementation.

# Methodology

- **Coordination-** The national ORP technical working group (TWG) was constituted jointly by the WHO and MOH.
- **Integrated work plan-** All partners contributed to one action plan to avoid duplication. There was one database for ORP site and GPS coordinates.
- **Methodology-** The method of implementation was to integrate the RCCE, WASH, Case management and IDSR components/pillars to ensure effective roll out of the ORP's.
- **Policy-** The ORP national guidelines were drafted in February 2023 and were used to coordinate the effective roll out of the ORP's.
- **SOP's-** SOP's and training materials were drafted.
- **Ethics, Data management-** The ORP data was collected using paper based data tools and then transmitted via Whatsapp and later on compiled into an Excel database. Other partners using mobile platforms-NYSS, Monday to manage data. Privacy and confidentiality were maintained.

## Methodology/implementation

- Data on disease burden and case fatality rate was collected from the national surveillance team.
- High burden districts were selected.
- District environmental officers (DEHO) were contacted and Cholera data reviewed through the IDSR focal point.
- Hotspots were selected together with the districts.
- 4 Volunteers, 2HAS's and 2 village chiefs were selected to be trained in ORP.
- 4 district officers were co-opted to be part of the facilitators.
- A 2 day training was conducted where village chiefs were tasked to select ORP sites.
- The third day consisted of deploying of the ORP kit, site inspection as well as on job mentorship. GPD coordinates were also collected.



# Challenges

- ORP kits- the kit is expensive and the exercise was donor driven.
- Incentives during training- there were challenges in providing the lunch allowances to district teams, this affected the implementation as other teams resorted to holding data so as to force the partners to pay them.
- Lack of a salary/incentive- While the Red cross volunteers were offered allowances, the other volunteers were on full voluntary basis (had t-shirt and bag as incentive). This created a lot of discrepancies and affected work at ORP sites including some volunteers dropping off.
- Data management- While data collection tools were manual, the data needed to be transmitted to the national level in parallel to the main reporting systems (IDSR/DHIS2 ) as this was symptomatic data. Most ORP sites did not have tablets or phones to capture the data in real time and relied on a picture of the form or SMS message to transmit information. This has limited the data collection process

# Recommendations

- To conduct supervision and mentorship.
- To conduct a preparedness survey.
- Digital health platform for data management of symptomatic patients.
- To integrate ORP's in the health services at primary level as a mainstay intervention at community level.
- To identify regular funding for the ORP program.

## Challenges

- Inadequate resources for case investigations, actual management and follow up
- Inadequate resources for daily reporting such as bundles, airtime
- Discrepancies in the reported cases and those available on the line list
- Inadequate skills for data management including analysis, the case of ORP

## Way forward

- Allocation of resources for case investigation and contact tracing
- Strengthening data management for decision making
- Continue with ORPs
- Monitor continuous utilization of Chlorine in all water points
- Continue with Health promotion activities including addressing issues of water and Sanitation plus early health seeking



# Next steps

- Preparing for the upcoming cholera season through:
  - Lobbied for political commitment and support-Presidential launch 24<sup>th</sup> October 2023 at an Island Likoma.
  - Strengthen emergency preparedness and preventive activities for Cholera
  - Continue with community case management through ORP
  - Put up an application for OCV preventive campaign
  - Lab based surveillance for Cholera (cultures) while maintaining RDTs

## *Partners support*

- MINISTRIES AND DEPARTMENT OF THE MALAWI GOVERNMENT
- WHO
- UNICEF
- CDC
- USAID
- RED CROSS SOCIETY

THANK YOU