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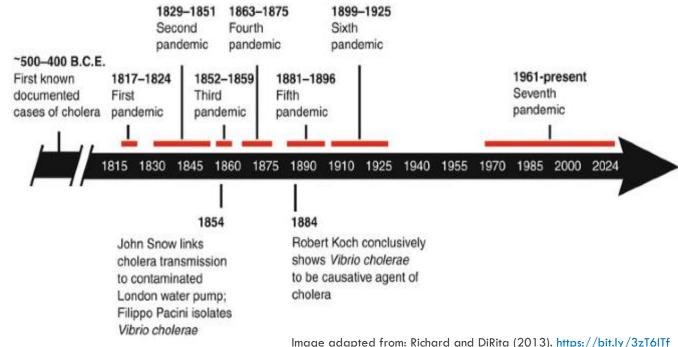




CHOLERA: HISTORY & GLOBAL SIGNIFICANCE

Timeline of cholera pandemics

- Cholera global health threat for centuries
- 1st recorded pandemic 19th century
- 7th pandemic since 1961
- Surge of Pandemic since 2021 largely fueled by climate change



- Controlled in "Global North", simply through WASH
- Cholera remains the Posterchild of poverty and vulnerability





CHOLERA: CURRENT GLOBAL SITUATION

1 January to 24 November 2024

522 800 Cases <u>reported</u> in 2024

4 600 Deaths <u>reported</u> in 2024

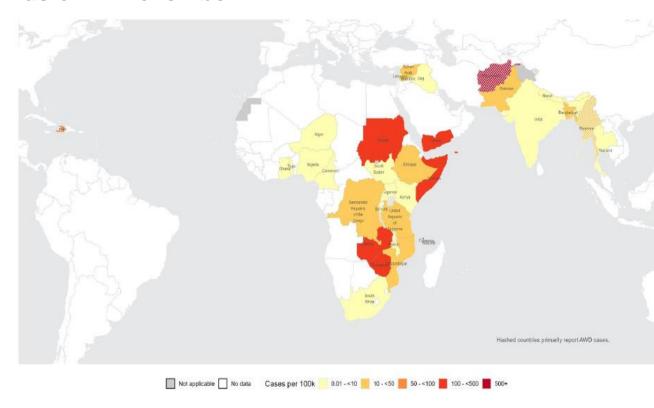
33 Countries reported cases in 2024

6 Countries currently in "Acute Crisis"

23 Countries with active outbreaks

42 Countries with identified direct risks

Global cholera / AWD attack rate per 100,000 in 2024, as of 24 November

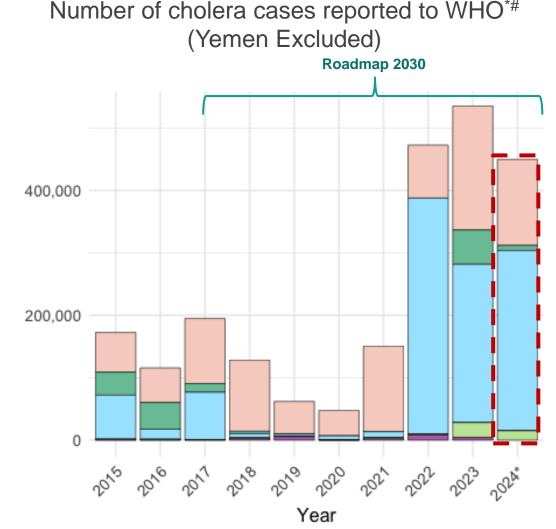


- . Please note that the data presented here should be interpreted with caution due to potential reporting delays. Such delays may affect the timeliness of reports, and consequently, the presented figures might not accurately represent the current situation.
- Given the diversity in surveillance systems, case definitions, and laboratory capacities across the reporting countries, the cholera case and death statistics presented here require careful consideration and are not directly comparable among countries.
- i. The global case fatality rate (CFR) for cholera warrants a prudent examination as it is heavily influenced by variations in surveillance methods. As many countries report only total deaths, the CFR reported here is calculated from the total number of deaths. <u>GTFCC recommends</u> that CFR be calculated only from deaths in healthcare facilities, with the number of community deaths reported separately.
- 4. In this document, the term 'cholera cases' encompasses both suspected and confirmed cases, unless otherwise delineated in the context of specific countries

CHOLERA: TRENDS IN THE LAST DECADE

• Cholera burden challenges

- Stigma (countries not reporting)
- Huge diversity surveillance systems
 - ✓ Over reporting (AWD)
 - ✓ Under-reporting
- After years of progress: since 2021 Surge of 7th Pandemic.
- Underreporting affects true scale of cholera burden worldwide.
- Cholera re-emerged >7 countries previously cholera-free for decades.
- January 2023, WHO classified global cholera surge grade 3 emergency, (highest level)

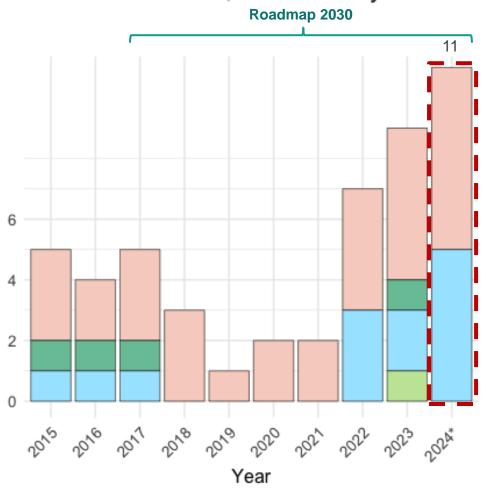




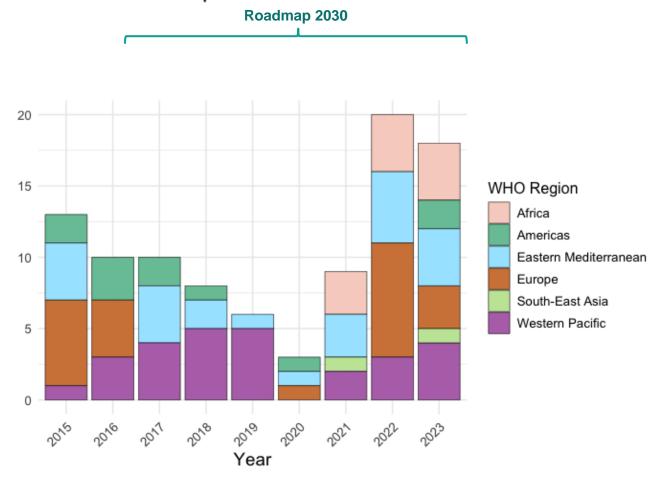


CHOLERA: TRENDS IN THE LAST DECADE

Countries with >10,000 Cases by Year



Countries with Imported Cholera Cases



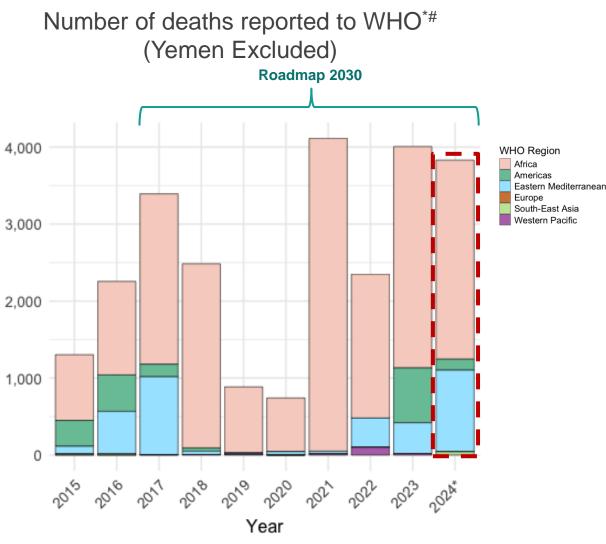


CHOLERA: DEATH TOLL IN THE LAST DECADE

- Cholera mortality grossly underreported
 - Stigma & diversity surveillance systems
 - Community deaths very seldomly reported
- All cholera deaths can be prevented with the tool we have now!
- Preventing cholera death, a moral obligation

Main causes

- Lack of timely access to <u>basic</u> health services
- Lack very delayed access to health care incl. community-based: Oral Rehydration Points
- Lack of community awareness
- Size of outbreaks



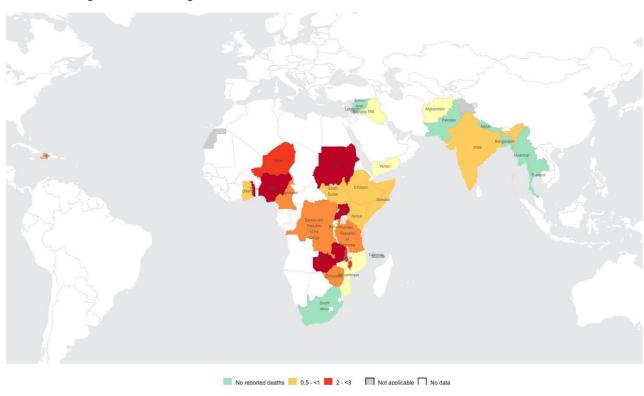
^{*}preliminary data for 2024 # source data 2015-2023 WER

CHOLERA: DEATH TOLL

1 January to 24 november 2024

- Unacceptably high case fatality rates in many countries
- Only few countries communicate on community deaths
- In 2024, 11 countries with CFR > 1%
 - Underlines severity of outbreaks
 - Illustrates also higher transparency
 - Example to be praised & followed

Cumulative Cholera / AWD Case Fatality Rate (CFR) by country1 January to 24 November 2024

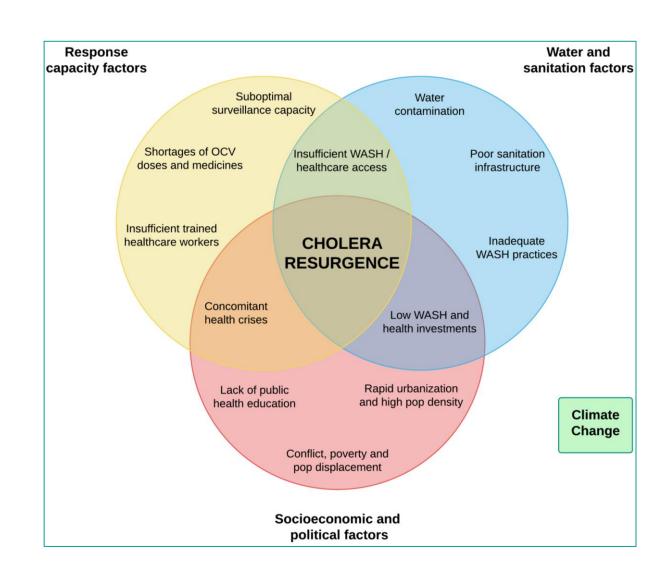


- 2023 <2500 deaths <u>officially</u> reported to WHO worldwide! (<u>Model 2017</u>: 95,000 deaths)
- Underreporting cholera deaths undermines devastating impact of outbreaks and limits considerably mobilization of resources



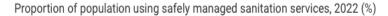
CHOLERA: KEY DETERMINANTS

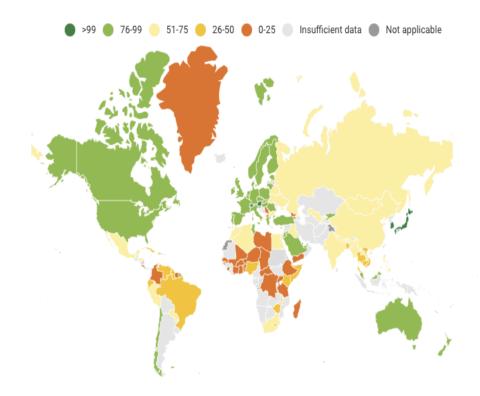
- Cholera resurgence driven by interplay of multiple factors,
- Exacerbated by climate change: Increasing frequency & intensity of extreme weather events
- Effective cholera control requires multisectoral strategies
- Cholera resurgence does not occur randomly but where multifactorial gaps overlap
- Requires to target resources in Priority Areas for Multisectoral Interventions (PAMIs) (aka hotspots)



THREATS: INADEQUATE WASH

- Inadequate WASH: THE source of cholera
- Multiple mechanisms, incl. contaminated water sources, poor hygiene, food contamination, open defecation, etc..^{1,2}
- 2022:
 - 3.5 billion people lacked safely managed sanitation
 - 2.2 billion lacked safely managed drinking water,
 - 2 billion lacked basic hygiene services.³
- Achieving WASH SDG targets in low-income countries require current rates of progress to increase:
 - 6-fold for basic water.
 - 13-fold for sanitation.
 - 16-fold for hygiene.
 - 20-fold for safely managed water.
 - 21-fold for safely managed sanitation.





This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

Sources

- 1. Jones et al. (2020) https://bit.ly/3y9D5fM
- Wolfe et al. (2018) https://bit.ly/3WzKKgY
- 3. UNICEF and WHO (2023) https://bit.ly/3Wh1wjp

THREATS: CLIMATE CHANGE

Current

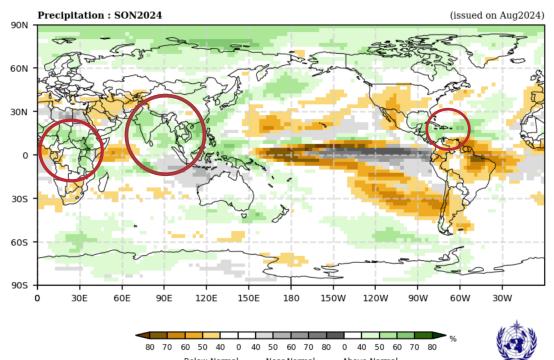
- Above-normal rainfall is expected in East, Central, and West Africa, Southeast Asia, and Caribbean.
- Below-normal rainfall is expected in Southern Africa.

Forecast

- 60% chance of transition to El Niña, especially in East and South Africa, potentially causing increased rainfall
- More cross-border collaboration needed
 - Same ecosystem same population –same challenges
 - Early detection, information sharing, coordinated response, prevention
 - Surveillance, access health care, community engagement, vaccination
- Large outbreaks Southern Africa (2022-2023) illustrate
 risk & feasibility although more needed
- More to develop globally

Probabilistic Multi-Model Ensemble Forecast

Beijing,CMCC,CPTEC,ECMWF,Exeter,Melbourne,Montreal,Moscow,Offenbach,Pretoria,Seoul,Tokyo,Toulouse,Washington



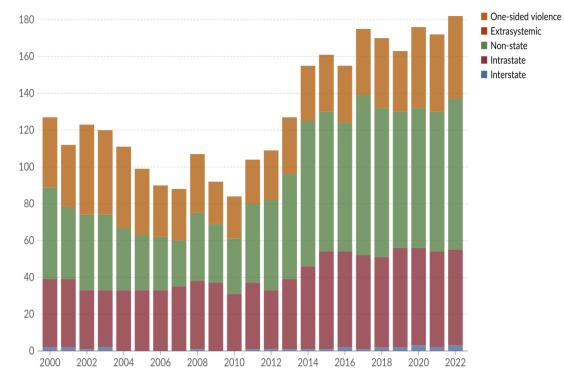


THREATS: CONFLICT

- Armed conflicts increased significantly in last two decades, with >180 conflicts reported in 2022.¹
- In 2024, 1 in 6 people exposed to conflict, a 22% rise in political violence in the past 5 years.²
- Conflict often results in destruction of WASH & healthcare infrastructures, worsens poverty, causes mass displacement, all soaring cholera risk.
- People in fragile contexts are twice as likely to lack safe drinking water & basic hygiene.3
- in 2022 study from 1997 to 2020, conflict increased rate of cholera outbreaks in Nigeria by 3.6 times and in DRC by 2.6 times.⁴

Number of armed conflicts, World

Included are interstate¹, intrastate², extrasystemic³, non-state⁴ conflicts, and one-sided violence⁵ that were ongoing that year.



Data source: Uppsala Conflict Data Program (2023)

OurWorldInData.org/war-and-peace | CC BY

Note: Some conflicts affect several regions. The sum across all regions can therefore be higher than the global number.

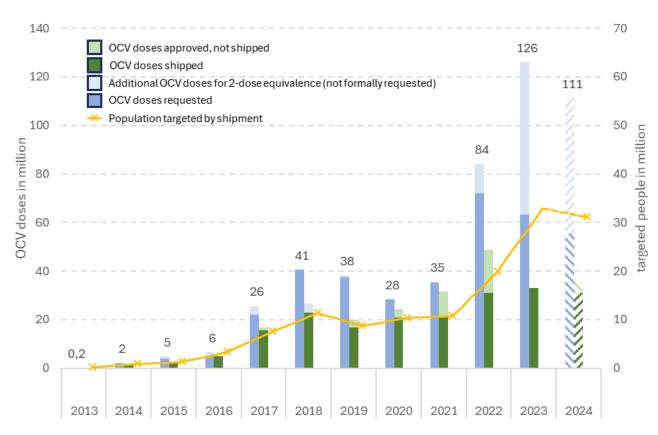
Sources

- 1. Our World in Data. (2024) https://bit.ly/4bUdy8b
- 2. ACLED (2024) https://bit.ly/3zSdicy
- 3. UNICEF and WHO (2023) https://bit.ly/3Wh1wjp
- 4. Charnley et al (2022) https://bit.ly/3YhRSQo

OCV: SUPPLY

- Since creation of stockpile (2013) >200 M
 doses shipped to 30 countries
- Number requested doses almost doubled two years in a row
- Oct 2022 ICG decision to temporarily suspend two-dose vaccination remains in effect in 2024
- Since Jan 2024, ICG approved 35.2 M doses for 15 countries
- Availabilities of doses for 2024: 49 M
- Massive efforts of sole manufacturer (Eubiologic) and partners: new simplified vaccine prequalified in April 2024
- OCV production expected to increase progressively and significantly from mid 2024 and in the coming years

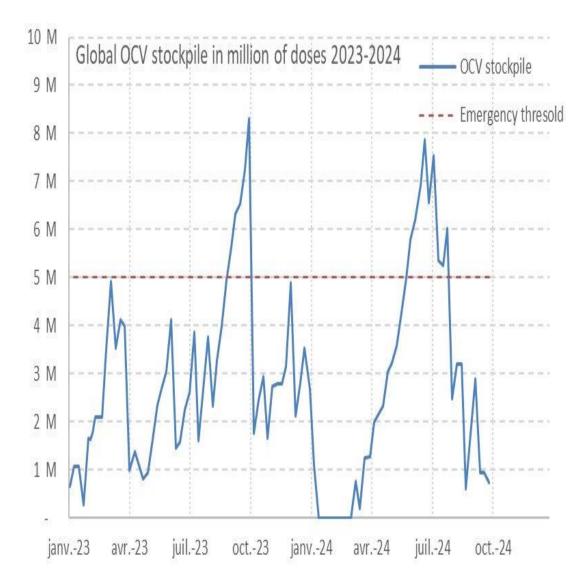
OCV demand and supply, 2013-2024 (per year of decision)



OCV: DEMAND

Since 2023, except 2 short periods stockpile level was below emergency threshold (5 M),

- Outbreak response demand unpredictable
- Epidemiology & demand "similar" to last year
- In 2023 received requests: 74 m doses (one dose)
- Timeliness of ICG requests to be significantly improved to reduce their size and to limit spread
- Timeliness of campaigns' implementation to be significantly improved to increase their impact.
- Post Campaign Coverage Surveys to be systematically implemented to evaluate, learn, improve quality & impact





OCV: DEMAND PREVENTIVE

Perspective

- Massive efforts of sole manufacturer (Eubiologic) (new simplified formulation) → prequalified in April 2024
- OCV production increasing progressively from mid 2024 and for the coming years
- New potential manufacturers in 2 next years

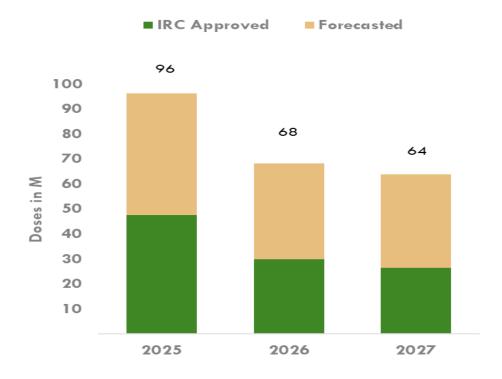
Marked Progress

- 2025-2027 ~229 Million doses forecasted
- Likely to increase over the years with new countries
- Multi-years plans essential to secure the OVC market and to increase production

Main Challenge

- Preventive vaccination still paused due to lack of vaccine
- Challenges to determine the good cut of point
- Resuming preventive vaccination will have to be progressive and sustainable

OCV doses approved and forecasted for preventive vaccination



Included in IRC approved: DRC, Bangladesh, Mozambique

For forecasted its assumed a selection the following: Nigeria, Ethiopia, Kenya, Cameroon, Malawi, Nepal, Zambia, Zimbabwe, Sudan

Please note these numbers are based on country applications and the feasibility of countries administering this many doses in one year has not yet been understood.



CHOLERA & SDGs

Ending cholera wide impact on improvement Public health

- Direct impact on cholera related morbidity and mortality.
- Impact in reducing morbidity and mortality of other diarrhoeal diseases
- Critical for achieving Sustainable Development Goals (SDGs).

Cholera elimination vital for:

- SDG 3: Good Health & Well-being by reducing morbidity & mortality.
- SDG 6: Clean Water & Sanitation via sustainable water management & hygiene practices.

Cholera control contributes to achieve other SDGs, as:

- SDG 1: No Poverty by reducing healthcare expenditures, freeing up resources.
- SDG 4: Quality Education by ensuring healthy children attend school regularly.
- SDG 5: Gender quality by preventing gender specific risks.
- SDG 8: Decent Work and Economic Growth by fostering healthy and productive populations.



THREAT: CRITICAL FINANCIAL GAP

Both preparedness & response critically underfunded

- Funding gap translates into insufficient resources across all 5 pillars notably
 - WASH, emergency response vs sustainable WASH
 - Accessibility to health care incl. community-based
 - Laboratory & surveillance to better target intervention
 - Vaccines production & delivery for rapid containment & prevention
 - Effective engagement of Communities in strategy
- Increased investments & support from governments, private sector, international stakeholders & donors urgently needed.
- Innovative funding mechanisms to bridge gap & ensure sustainable cholera control

CONCLUSION

- Setback driven by climate change can be overcome
- Effective multisectoral strategy exist but lacks full implementation due to limited resources & commitment
- Many affected countries are making notable efforts, but scaling up actions is essential to tackle the problem effectively
- Effective Communities' involvement crucial for implementation
- Increased Political Commitment at <u>national</u> & international levels needed for climate-resilient cholera control
- More national & global advocacy needed but demands greater country transparency & seamless information sharing
- Ending Cholera isn't just ticking a box it's a game changer for tackling all acute diarrheal diseases and beyond.
- Without Ending cholera SDGs can be fully achieved
- Immediate decisive actions required to address this effectively and achieve long-term improvements

The time to act is now!



THANK YOU