

Statement from the Steering Committee of the Global Task Force on Cholera Control (GTFCC)

As members of the GTFCC Steering Committee, we are appealing to you today from the frontlines of a genuine emergency. By the end of 2022, an unprecedented 30 countries were experiencing cholera outbreaks. We need your help to solve this crisis.

Cholera is an ancient disease, yet the world is currently facing an acute cholera crisis, which comes on the heels of a steady, multi-year reduction in cholera cases and deaths. This global reduction was the result of concerted efforts by countries and global health partners to prevent and control cholera; however, conditions have changed.

Due to conflict, forced migration, the economic and social disruptions of the COVID-19 pandemic, and a changing climate, many countries that had not been affected by cholera for years – including Haiti, Lebanon, and Syria – are presently battling outbreaks. Likewise, cholera-endemic countries that have worked actively in recent years to prevent and control cholera have witnessed their efforts being undone.

Climate change multiplies the risk of cholera around the world

Many of the countries that faced cholera outbreaks in 2022 were badly affected by extreme weather events. As the climate emergency worsens, human displacement will intensify, along with droughts and flooding – all conditions that give rise to cholera outbreaks. Unless we invest in systems that build preparedness and resilience among at-risk populations, the cholera burden will continue to rise.

GTFCC modeling has shown that population growth and urbanization alone could lead to a doubling of cases over the next 20 years if we don't act.¹ Climate change further increases the risk of waterborne diseases like cholera^{2,3,4,5,6} by altering the temperature, precipitation levels, and frequency of extreme weather, threatening to reverse the progress made in recent years.

In the short-term, predictions for cholera look bleak – if we do not act now, the number and severity of cholera outbreaks will continue to grow. **We do not have the luxury of time.**

¹ Ending Cholera by 2030 Global Roadmap Summary

² How Climate Change Affects Waterborne Diseases

³ Levy et al 2016, Untangling the impacts of climate change on waterborne diseases: A systematic review of relationships between diarrheal diseases and temperature, rainfall, flooding, and drought

⁴Charnley et al 2021, Drought-related cholera outbreaks in Africa and the implications for climate change: a narrative review

⁵ <u>IOM Global Data Institute Thematic Brief #1</u>: Evidence Summary on Climate Change and the Future of Human Mobility

⁶ Moore et al 2017, El Niño and the shifting geography of cholera in Africa

What we must do now: Prioritize saving lives

Despite the risks posed by our changing climate, cholera can be prevented and controlled with the tools we have today. Although cholera can kill within hours, it can also be effectively treated with rehydration – including simple oral rehydration solution (ORS) – as well as antibiotics and intravenous fluids for more severe cases. But the hard reality is that many people die because they don't have timely access to medical care.

In fact, we are seeing evidence that case fatality rates – the percentage of people who die after becoming sick with cholera – are even higher than usual in many of the current cholera outbreaks. Among countries currently affected (and for which data are available), at least ten have a case fatality rate above the 1% threshold that is used to measure whether there is adequate access to medical care.

With an estimated 95,000 deaths from cholera in a typical year, the increase in cases and deaths has become a public health emergency in several countries across Asia, Africa, and the Americas. **Every death from cholera is a preventable tragedy – and reducing this mortality is within our grasp.**

To prevent deaths, cholera-affected countries must immediately set up cholera treatment facilities and ensure they are adequately staffed and equipped to ensure access to life-saving treatment.

We call on cholera-affected countries – as well as global and local donors that support emergency water, sanitation, and hygiene (WASH) efforts – to immediately deploy their activities in cholera hotspots (highly endemic areas that account for most cholera cases). It is critical to ensure people have immediate access to safe water so that the outbreaks do not continue to grow.

Supplies used for the detection and treatment of cholera, including rapid diagnostic tests, oral rehydration solution, and intravenous fluids, are critical for saving lives. Unfortunately, as outbreaks continue to emerge and demand for supplies rapidly increases, stockouts are becoming a reality. We must accelerate production of these supplies and ensure their immediate delivery to countries that need them.

Finally, we encourage countries to request use of oral cholera vaccine (OCV) as soon as possible after reporting an outbreak to help to ensure the vaccine can be given in time to save lives and prevent further spread. OCVs are safe, effective, inexpensive, and easy to deliver. Although vaccination is not a long-term solution for cholera control, it buys time to implement a sustainable multi-sectoral cholera control strategy.

What we can do in the next 6 to 12 months: Focus surveillance and WASH investments within cholera hotspots

To prevent the next large outbreak, countries need public health surveillance systems that can quickly detect cases of cholera and laboratory systems to confirm cases so that immediate action can be taken. All cholera-affected countries should strengthen their surveillance systems and map the locations of their cholera hotspots as soon as possible.

We also ask donors and countries to begin planning for critical large-scale WASH infrastructure investments in cholera hotspots. These investments will prevent future cholera outbreaks as well as other water-borne diseases, improving the health of the most vulnerable and marginalised people in the population and contributing to a range of health and development goals.

WASH investments in cholera hotspots can more than double the return on investment, yielding \$10 for every \$1 invested. This compares to a return of around \$4 when WASH resources are *not* targeted in cholera

hotspots.⁷ While additional funds would be needed to realize the right of all human beings to safe water and sanitation, we can make immense progress simply by targeting cholera hotspots with existing WASH resources.

Finally, we must engage more effectively with impacted communities, putting them at the center of the response, and providing tools and information about the risks of cholera and how households can protect themselves.

What we can do in the coming years: Work to meet demand for vaccines and bridge from emergency response to long-term WASH investment

OCV has been and remains a gamechanger in cholera prevention and control. The first dose of OCV can help to bring an outbreak under control, and following vaccination with two doses of OCV, people are protected for at least three years,⁸ with people over age five protected for even longer – at least five years.⁹ This gives countries time to invest in improvements in their surveillance, health care delivery, and WASH systems to prevent the recurrence and spread of cholera and other waterborne diseases in the future.

Given the large number of countries currently affected by cholera outbreaks and the limited OCV supply available, the International Coordinating Group (ICG) – which governs the use of the Gavi-funded OCV stockpile – made the difficult decision in 2022 to temporarily hold back the second dose of OCV in outbreak settings.

The number of OCV doses delivered has increased exponentially in the past nine years, from just over 200,000 doses when the stockpile was created in 2013 to ~35 million doses available in 2022. However, this represents less than half of the estimated demand, which is more than 75 million doses per year. **We need greater vaccine supply to pursue both reactive and preventive campaigns.**

The GTFCC and Gavi Alliance partners are working with manufacturers to increase vaccine supply. South Korea-based firm Eubiologics leads the way in OCV production and has made a strong commitment to ramp up their manufacturing. We welcome the recent news that South African-based Biovac will partner with the International Vaccine Institute (IVI) to manufacture OCVs.¹⁰ This is a massive victory for locally sourced vaccine production; however, we still urge additional vaccine manufacturers to step into this space and support our global capacity.

As we get the current outbreaks under control, shifting to preventive vaccination in cholera hotspots — *before* an outbreak occurs — is an effective way to save lives and helps to create consistent, predictable demand for OCVs, which provides needed confidence for vaccine manufacturers, resulting in more supply. Beginning in 2023, countries will be able to apply for OCV for preventive use through Gavi.

⁷ Investing in a Cholera-Free World, GTFCC.org

⁸ <u>Wierzba TF 2019</u>. Oral cholera vaccines and their impact on the global burden of disease. Hum Vaccin Immunother. 2019;15(6):1294-1301. doi: 10.1080/21645515.2018.1504155. Epub 2018 Oct 12. PMID: 30183486; PMCID: PMC6663124.

⁹ <u>Bhattacharya S et al. 2013</u> 5-year efficacy of a bivalent killed whole cell oral cholera vaccine in Kolkata, India: A cluster randomized, double-blind, placebo-controlled trial. Lancet Infectious Disease. 13: 1050-6. 2013.

¹⁰ Biovac Press Release

Toward Ending Cholera by 2030: Our ask to global leaders

The Global Cholera Roadmap¹¹ establishes a vision for a future without cholera, calling for a 90% reduction in cholera deaths and cholera elimination in 20 countries by 2030. These goals not only remain possible but are now more urgent than ever due to the effects of climate change.

To the leaders of cholera-affected countries: we call on you to declare outbreaks quickly when they are detected and provide urgent medical care to those who are sick to prevent unnecessary deaths. We urge you to apply for use of OCVs as soon as possible when an outbreak occurs and use vaccination as one component of a comprehensive response; this complementary measure will be most effective during the earliest stages of an outbreak.

We also urge you to plan for preventive use of OCVs in areas of your country where cholera is endemic as part of a broader approach to end the transmission of the disease in the longer term. In addition, we encourage you to prioritize investments in WASH interventions and infrastructure within cholera hotspots, aligning with National Cholera Plans.

To global health donors: we call on you to support countries' National Cholera Plans and to immediately prioritize WASH and surveillance investments in cholera hotspots.

We call on all global leaders to rise to this occasion; by working alongside cholera-affected countries and communities, by committing resources and providing leadership, as well as improving communication and coordination, we can reduce deaths from cholera and limit its spread.

Ultimately, by ending cholera for good, we can help put the world's poorest people back on the global development agenda and increase humankind's resilience against the effects of climate change. Please join us in this fight.

Now is the time.

¹¹ Ending Cholera: A Global Roadmap to 2030, GTFCC 2017