

Public health emergencies: preparedness and response

Cholera prevention and control

Report by the Director-General

BACKGROUND

1. This report has been prepared in response to resolution WHA71.4 (2018), in which the Seventy-first World Health Assembly requested the Director-General to report to the Seventy-third World Health Assembly, through the Executive Board at its 146th session, on the global cholera situation and evaluate efforts made in cholera prevention and control.

2. Cholera is an acute diarrhoeal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio cholerae*. The disease is extremely virulent: it can cause severe acute watery diarrhoea with severe dehydration. It takes between 12 hours and 5 days for a person to show symptoms after ingesting contaminated food or water. Cholera affects both children and adults and can kill within hours if untreated. It remains a global threat to public health and an indicator of inequity and lack of social development.

GLOBAL CHOLERA SITUATION

3. In 2018, 499 447 cholera cases and 2990 deaths resulting from cholera worldwide were reported to WHO. The 2018 figures showed a 59% decrease when compared with 2017.¹ Excluding the cases reported from Yemen (in a context of an ongoing humanitarian crisis and where reporting is imprecise), the total number of cases and deaths globally in 2018 were 128 121 and 2485 respectively, a 34% decrease in the number of cases and a 27% decrease in the number of deaths compared with those in 2017. This number of cases in 2018 represents the fewest number of cases reported worldwide since 2004. The global decrease in case numbers in 2018 mirrored a reduced cholera incidence in the WHO African Region where there was a 37% decrease in cholera cases and a 25% decrease in cholera deaths when compared with 2017 figures.

EFFORTS MADE IN CHOLERA PREVENTION AND CONTROL

4. Since 2018, several countries have made remarkable gains in overall cholera control and prevention. In South Sudan, no cholera cases have been reported since the final weeks of 2017. The country has implemented a broad preventive cholera vaccination programme, with vaccine obtained from the global vaccine stockpile supported by Gavi, the Vaccine Alliance. The programme has continued in 2019. A comprehensive national cholera control plan that will detail the implementation of

¹ Cholera, 2017. Wkly Epidemiol Rec. 2018;93(38):489-500
(<https://apps.who.int/iris/bitstream/handle/10665/274654/WER9338.pdf?ua=1>, accessed 14 October 2019).

other crucial control measures, particularly the water sanitation and hygiene strategy 2018–2025, is nearing completion. In Haiti, in 2018, following an aggressive rapid response and outbreak interruption strategy, the country saw its lowest number of cases since the start of the cholera epidemic in 2010. Furthermore, the country has not reported a single confirmed case since February 2019 and the progress made towards cholera elimination¹ is significant. In Somalia, implementing a broad cholera control plan is challenging. Following a year (2017) in which 75 414 cases and 1007 deaths were recorded, several preventive cholera vaccination campaigns were conducted. The number of cases and deaths dropped by more than 90%, with only 6761 cases and 45 deaths reported in 2018. In Yemen, despite the challenges of the ongoing humanitarian crisis, the country and its partners were able to reduce the number of cases, from over 1 million suspected cases in 2017 to 371 326 suspected cases in 2018, with the number of deaths being reduced by 78% (from 2261 to 505) in the same period. These data show that the overall objective of the Global Task Force on Cholera Control's strategy, Ending Cholera: A Global Roadmap to 2030² – a 90% reduction in the number of deaths resulting from cholera and elimination of cholera in 20 of the 47 countries currently affected by 2030 – is achievable and on track.

5. The Global Roadmap was developed to leverage and reinforce efforts to make progress towards the 2030 Agenda for Sustainable Development, specifically Sustainable Development Goals 3, 6 and 11. Such efforts should reduce the prevalence and spread of cholera as well as other diarrhoeal diseases and enteric infections. The Global Roadmap was launched in October 2017 and was recognized by the Seventy-first World Health Assembly in 2018.³ In August 2018, the Regional Committee for Africa adopted the actions proposed in the regional framework for the implementation of the global strategy for cholera prevention and control, 2018–2030, which guides Member States in the region in implementing the Global Roadmap.⁴

6. The Global Roadmap outlines three main axes for cholera prevention and control: early detection and quick response to contain outbreaks at an early stage; a multisectoral approach to prevent cholera in endemic countries (strengthening of surveillance, health care systems, water, sanitation and hygiene solutions, and community mobilization as well as mass cholera vaccination campaigns for communities at risk) targeting hotspots; and an effective mechanism of coordination for technical support, resource mobilization and partnership at the local and international levels.

7. Early detection of and rapid response to cholera are critical to contain outbreaks and reduce mortality. Two successful examples of this strategy have been seen over the past two years. In March 2019, Mozambique suffered the arrival of two cyclones that hit known cholera-endemic zones with heavy rains. The Ministry of Health rapidly developed a multisectoral response plan and received an immediate shipment of oral cholera vaccines, permitting vaccination to start 10 days after the first case of cholera was reported in Beira. The impact was seen almost immediately, with a reduction in the number of cases and an end to the epidemic three weeks following the completion of the first round of vaccination. In September 2018, Zimbabwe began to see cholera cases in the Harare metropolitan area, in a pattern that was reminiscent of that at the start of a massive outbreak in 2008–2009, which spread across the country. A sustained outbreak became established in Harare's high-density southern suburbs

¹ Cholera elimination: any country that reports no confirmed cases with evidence of local transmission for at least three consecutive years and has a well-functioning epidemiological and laboratory surveillance system able to detect and confirm cases (as defined in Ending cholera: a global roadmap to 2030, see footnote 2).

² Global Task Force on Cholera Control. Ending cholera: a global roadmap to 2030. Geneva: World Health Organization; 2017 (<https://www.who.int/cholera/publications/global-roadmap.pdf?ua=1>, accessed 14 October 2019).

³ See resolution WHA71.4 (2018).

⁴ See document AFR/RC68/7 (https://www.afro.who.int/sites/default/files/2018-09/AFR-RC68-7%20Cholera%20Control%20Strategy%20Framework_Post%20RC68_0.pdf, accessed 10 October 2019).

in the following weeks. A rapid decision to employ oral cholera vaccines to cover the communities that had been so heavily affected a decade earlier led to a mass cholera vaccination campaign covering 1.4 million people. Although there were limited outbreaks in a few other sites in the country, there was no repeat of the 2008–2009 outbreak that sickened more than 100 000 people.

8. As at mid-2019, over 58 million doses of oral cholera vaccines have been shipped to 25 countries, including 17.8 million doses in 2018. This compares with just 200 000 doses shipped in 2013, when the global vaccine stockpile was created. Oral cholera vaccine is just one tool in a large toolbox that includes sustainable water, sanitation and hygiene solutions, but it serves as a critical bridge to such longer-term efforts.

9. Another promising development in 2018–2019 was the recognition that control or elimination of cholera requires governments to acknowledge and report the disease. Specifying cholera by name permits the introduction of a specific multisectoral control programme that targets the known risk factors and launches specific control measures. Bangladesh reported statistics on cholera for 2018 to WHO. In 2019, Ethiopia and the Sudan have reported cholera cases and are further engaging in cholera-specific control activities.

10. Several countries and areas have made a commitment to, and are making significant progress in, developing multisectoral cholera control plans that are tailored to the specific context of the country while retaining the strategic framework of the Global Roadmap. Zanzibar, United Republic of Tanzania and Zambia have both formally launched comprehensive plans for cholera elimination. Many other countries such as Bangladesh, Kenya, Mozambique, South Sudan and Zimbabwe, have also become engaged and are currently developing their national cholera control plans along the lines set out in the Global Roadmap.

11. The partners of the Global Task Force on Cholera Control continue to provide support for comprehensive and coordinated cholera control activities and technical guidance to countries. Since 2018, the Global Task Force has developed a number of tools and guidance, including a framework for the development of national cholera plans for control or elimination, guidance on and a tool for cholera hotspot identification, a revised cholera outbreak response field manual, guidance on cholera surveillance, technical guidance on the integration of water, sanitation and hygiene efforts and community engagement activities with vaccination campaigns with oral cholera vaccine.

12. The International Federation of Red Cross and Red Crescent Societies, one of the partners of the Global Task Force, have engaged with the Islamic Development Bank in seeking to raise up to US\$ 150 million globally to support sustainable water, sanitation and hygiene projects in cholera hotspots in the most affected Member States of the Organization of Islamic Cooperation over the next 10 years.¹ The “One WASH” programme contributes to Sustainable Development Goals 3 and 6 and is aligned with the Global Roadmap.

13. Several challenges remain and need to be overcome in all countries in order to fully control cholera and achieve the objectives of the Global Roadmap: more robust epidemiological and laboratory surveillance data are needed to precisely identify cholera hotspots and detect outbreaks at an early stage; detection, confirmation and reporting of outbreaks should be accelerated everywhere, to ensure

¹ See One WASH. Geneva: International Federation of Red Cross and Red Crescent Societies (<https://ifrcwatsanmissionassistant.wordpress.com/one-wash/>, accessed 10 October 2019).

immediate control; interventions that separate water, sanitation and hygiene efforts from immunization activities should be avoided; and vaccine supply should cover the increasing demand.

14. The movement to end cholera has made significant progress since the launch of the Global Roadmap. Several cholera-affected countries have demonstrated strong leadership and determination to stop cholera outbreaks and develop multisectoral cholera control plans. Unprecedented use of oral cholera vaccines has resulted in a significant reduction of the disease burden in countries in which cholera is endemic and outbreaks in multiple settings have been controlled. An energized Global Task Force partnership continues to support countries in their efforts. Ending cholera as a public health issue by 2030 will require sustained collaboration and commitment from cholera-affected countries, technical partners and international donors.

ACTION BY THE EXECUTIVE BOARD

15. The Board is invited to note the report. The Board may wish to focus its discussions on how to ensure that surveillance and early reporting of cholera is strengthened in line with the International Health Regulations (2005) and that cholera prevention and control measures are developed and implemented in affected countries, in accordance with resolution WHA71.4.

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