

From a crisis response
to institutional capacity
building:

Experiences from
Zimbabwe on
cholera outbreak



World Health
Organization

REGIONAL OFFICE FOR Africa

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Zimbabwe

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From a crisis response to institutional capacity building: experiences from Zimbabwe on cholera outbreak

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This report was prepared by the Ministry of Health and Child Welfare and the World Health Organization for sharing experience with participants at the 2011 World Conference on Social Determinants of Health. The opinions expressed in this report are those of the authors, based on experience gained in managing the cholera outbreak, in-depth interviews with key informants and discussions undertaken for the purposes of developing this report.

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An earlier draft of this case study was included in a special collection of global experiences on intersectoral actions which was widely disseminated during the World Conference on Social Determinants of Health held in Rio de Janeiro, Brazil in 2011. At the country level, the review process leading to the finalization of the case study generated multi-stakeholder policy and strategy discussions on implementing intersectoral actions to address social determinants of health.

The final product is a result of collective efforts of many individuals and organizations. However, the drafting team included Dr Davies Dhlakama, Dr Portia Manangazira, Director, Disease Control and Prevention, Ministry of Health & Child Welfare; Dr Anna Miller, (Consultant); Mr Laxon Chinhengo, Ministry of Labour & Social Services; Dr Stanley Midzi, WHO Country Office, Zimbabwe.

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Abstract

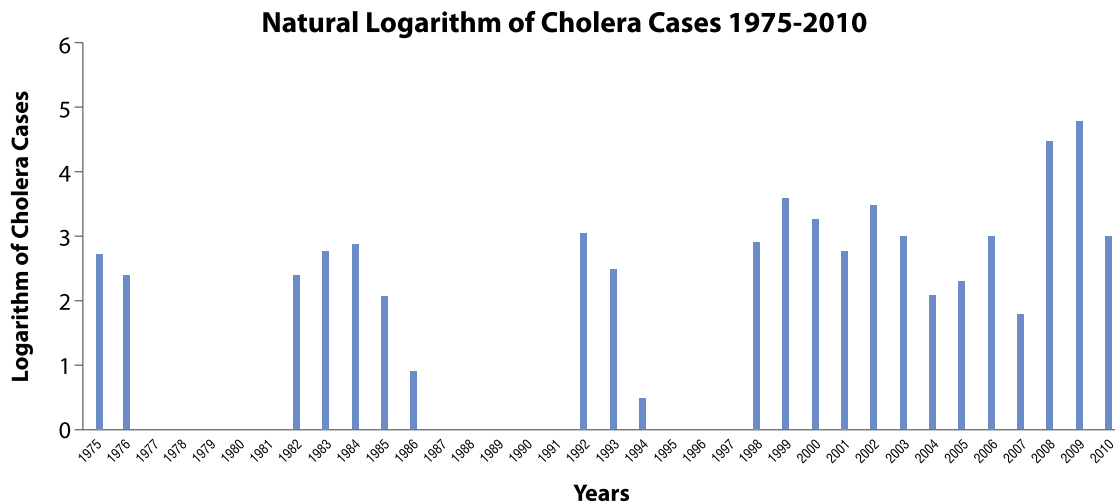
This paper evaluates the multisectoral response to the 2008/09 cholera outbreak in Zimbabwe and examines the extent to which the social determinants of health (SDH) driving the outbreak, in particular, water and sanitation, were addressed. The study provides the evidence that determinants of health are important in that most drivers of health consequences emanate from social, economic, political and environmental spheres. It also showed that, in order to institute a comprehensive emergency response, intersectoral actions to address the SDH driving the outbreak, particularly given the prevailing context of poverty and national systemic constraints, were needed.

A comprehensive desk review of documented response efforts to the cholera outbreak of 2008/09 was undertaken. Key informants were identified and interviewed to provide their experiences of the outbreak as well as suggest what could have been done differently. The study also assessed whether the multisectoral collaboration contributed to addressing the social and other determinants that caused and/or propagated the outbreak. The study revealed that the combined multisectoral efforts eventually resulted in the control of the cholera outbreak which was declared officially over in July 2009. There have been reports of sporadic outbreaks thereafter, but the concerted efforts and multisectoral measures put in place since December 2009 to address the identified SDH have enabled the country to realize dramatic reductions in both cholera cases and deaths across the country. Subsequently, almost a year elapsed without cholera cases being reported. This outbreak demonstrated that responding to an outbreak requires addressing the health emergency at the same time as the SDH.

1. Introduction

Between August 2008 and July 2009, Zimbabwe experienced a catastrophic cholera outbreak which ultimately resulted in 98 592 cases and 4288 deaths. Fifty-five of Zimbabwe’s 62 districts (89%) were affected. The overall crude case-fatality rate was 4.3%, well above the acceptable WHO level of 1%. 61.4% of all reported deaths took place in the community¹. This outbreak took place against a backdrop of increasingly frequent outbreaks since 1998 as shown in Figure 1.

Figure 1: Cholera occurrence in Zimbabwe, 1975-2010

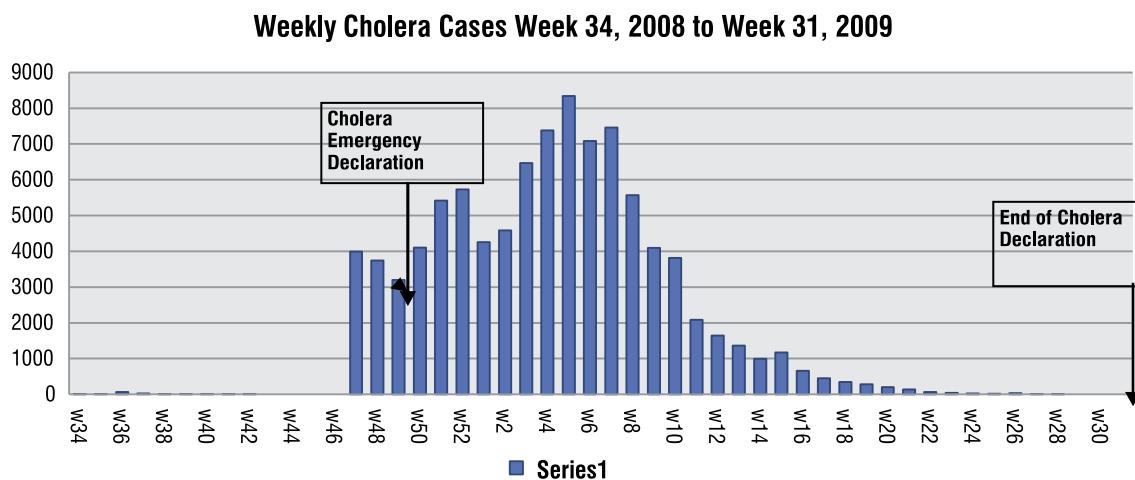


Source: Ministry of Health and Child Welfare, 2009

Previous outbreaks had been confined to discrete geographical zones, were of limited duration and affected far fewer people. Notably, this unprecedented outbreak coincided with heightening socioeconomic decline where water and sanitation infrastructure had deteriorated to its worst level. Additionally, all six building blocks of the health systems had virtually collapsed. Several risk factors were identified in this outbreak, including inadequate and unsafe water sources, poor sanitation and poor personal hygiene in both urban and rural areas. The mobility of populations within urban areas, and from urban to rural areas, became major factors in the spread, with an ongoing shortage of health care workers limiting early detection, reporting and management of the outbreaks.

¹ Evaluation of the Health Cluster Response to the Cholera Outbreak in Zimbabwe, Centre for the Evaluation of Public Health Interventions (CEPHI), Department Of Community Medicine, University of Zimbabwe and the World Health Organization.

Figure 2: Trends in cholera cases and deaths over time



Source: Ministry of Health and Child Welfare, 2009

The outbreak began in Chitungwiza municipality, a high-density suburb, and quickly spread to adjacent Harare where the predisposing factors of chronic severe water shortages, compounded by dilapidated sewerage systems, created fertile ground for the spread of diarrhoeal and related diseases. The severe shortage of water forced residents to the water from shallow wells which were contaminated with sewage flowing from the burst sewer systems.

It is also important to note that the six building blocks of health systems were severely weakened in terms of the ability to mount a timely and adequate response to the outbreak. Experienced health workers were few and poorly motivated to deliver a prompt and effective response. The health information system was severely affected by the prevailing context of poor telecommunications, erratic electricity supplies, lack of radio networking and inadequate transport. The remaining health workers on the ground were also over-stretched and not trained to deal with the increasing numbers of cholera cases and deaths. This affected timely and adequate documentation of all cases at the beginning of the outbreak. As such the surveillance data were initially of very low timeliness and completeness, further complicating an understanding of the outbreak and making prompt action difficult. In response, donors and partners with the means complemented and assisted in strengthening data collection and transmission.

The initial response to the outbreak was based on existing Ministry of Health and Child Welfare (MOHCW) policy and implementation frameworks for epidemiology and disease control. Additional support coming in from health partners on the ground was on an ad hoc basis. However, by 10th December 2008, the situation had deteriorated significantly. From a total of 30 cases by the 1st of September 2008, the number had quickly escalated to over 15 500, reported in nine out of the ten provinces of the country. The scale of the outbreak had exceeded what the MOHCW had experienced before, with the worst previous outbreak in 1999 reporting a total of 4081 cases in six provinces². It was clear that there was no surge capacity; a severely depleted and demoralized health workforce

² Evaluation of the Health Cluster Response to the Cholera Outbreak in Zimbabwe, Centre for the Evaluation of Public Health Interventions (CEPHI), College of Health Sciences, Department of Community Medicine, University of Zimbabwe; and the World Health Organization.

with no previous cholera outbreak management capacity, very limited resources, limited information and compromised logistics because of the prevailing national crisis.

The increasing severity of the situation typified by high numbers of cases and high case-fatality rate (CFR) increased anxiety and created panic within the population, health care workers and development partners, especially WHO and UNICEF. This culminated in the declaration of the outbreak as a National Emergency on 6th December 2009 by the Government of Zimbabwe, through the MOHCW.

The need for a coordination platform for all stakeholders responding to the emergency led the MOHCW and WHO to establish a joint command and coordinating mechanism, the Cholera Command and Control Centre (C4). The location of this command centre should have been the MOHCW/HQ premises. However, at that time, the MOHCW premises did not have functional sanitation facilities and its location within a government security building presented difficulties in the necessary round-the-clock access. As such, the WHO Office Annexe was selected to host the C4 coordination meetings. While this meant that resources for C4 did not come directly to building capacity in the MOHCW, it also meant that the centre was able to function at full capacity as quickly and effectively as possible.

2. Context

Cholera is a diarrhoeal disease caused by the bacterium *Vibrio cholera*, usually transmitted through faecally-contaminated water or food. Cholera has a very short incubation period of 2 hours to 5 days, and if left untreated, the severe loss of large amounts of fluid and salts can lead to dehydration and death within hours. Outbreaks occur in environments where water supply, sanitation, food safety and hygiene are inadequate. For this reason, the control of cholera demands a multisectoral approach with stakeholders who will address these socioeconomic parameters.

The macroeconomic contextual factors prevailing at the onset of the outbreak included negative gross domestic product and massive hyper-inflation, with a severe lack of resources. Socio-political challenges included a recently disputed election with unresolved government status and sanctions against Zimbabwe. These combined factors contributed to a number of severe additional challenges for the country, including high unemployment, attrition of skilled and experienced health workers, food insecurity, shortages of basic commodities, reduced household incomes, transport failures, shortages of medical supplies and commodities, closure of many health facilities and progressive dilapidation of infrastructure, including the water and sewage systems.

The case-fatality rate (CFR), or the proportion of patients dying from cholera, was reported to vary across cities, provinces and districts and highlighted a number of key inequities in places of residence, wealth group, sex, race and occupational and educational levels. Additionally, the underlying prevalence of co-morbid conditions such as HIV, cardiac conditions and malnutrition appeared to compound cholera mortality. The majority (61%) of deaths occurred in the community due to factors such as limited geographical access, lack of commodities such as sugar and salt to make salt sugar solution (SSS) at home, soap for hand washing, lack of awareness and access to adequate information and

lack of knowledge about how cholera spreads². Late responses to clinical cases were seen due to low numbers of nurses and doctors, EHTs and VHWs on the ground, poor communications and a failed referral system.

These inequities can be understood to have arisen from the unaddressed social determinants of health, which included:

- **Individual factors** – no cholera immunity within the general population as previous outbreaks of cholera had been sporadic, weakened immune systems due to HIV and AIDS, and poor nutritional status.
- **Individual lifestyle factors** – poor hand-washing practices, poor sanitation coverage, unsafe water consumption, unhygienic food preparation, storage and consumption in view of the scarcity of water and basic food supplies in the country.
- **Social and community networks** – consumption of contaminated food at funeral gatherings; traditional practices of preparing the dead for burial; practice of handshaking at funerals; history of frequent travelling including to cholera-affected areas; belonging to a religious sect which discourages seeking medical attention.
- **Living and working conditions** – declining access to safe water and improved sanitation; poor personal hygiene.
- **Poor perception of health delivery system by communities** – communities lost trust in the established health care delivery system that was no longer offering comprehensive services.

As such, while the outbreak became known initially to the MOHCW as a health emergency, it was clear that controlling the outbreak and preventing the ongoing spread required a multisectoral response with the cooperation and collaboration of multiple stakeholders at all levels.

3. Methodology

This study follows a comprehensive desk review of documented response efforts to the cholera outbreak of 2008/09. Key informants were identified and interviewed to provide their experiences of the outbreak and suggest what could have been done differently. The study also assessed whether the multisectoral collaboration contributed to addressing the social and other determinants that caused and propagated the outbreak.

4. Results

Following the declaration of a national emergency by the Minister of Health and Child Welfare on 9th December 2008, a Cabinet-level multisectoral Task Force was immediately established to coordinate the government response to the situation. Chaired by the Ministry of Local Government and Urban Development with the Civil Protection Unit as secretariat, the Task Force brought together high-level leadership (including Ministers and Permanent Secretaries) to provide policy direction on the response to the outbreak. Representation included:

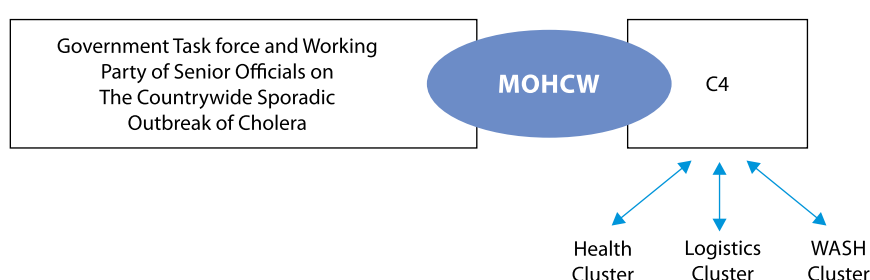
- Office of the President and Cabinet
- Ministry of Health and Child Welfare
- Ministry of Water Resources and Infrastructural Development
- Ministry of Finance (Reserve Bank of Zimbabwe)
- Ministry of Energy and Power Development
- Ministry of Information and Publicity
- Ministry of Home Affairs
- Ministry of Transport and Communications
- Ministry of Defence
- Ministry of Foreign Affairs

This was supported by a working group of senior officials and a command centre with various subcommittees to take forward the work. Unfortunately, the Task Force’s effectiveness was limited by lack of resources to meet all of the identified needs. In addition, the meetings were infrequent and often lacked a quorum, making binding decisions difficult or impossible. Several countries including Namibia, South Africa, Zambia, China and Russia responded with donations in cash and kind, including IV fluids, bicycles and other commodities. But given the prevailing context in the country, some donors and governments were reluctant to provide funds directly to the Government of Zimbabwe.

For this reason, and after being officially approached by the Government of Zimbabwe, WHO simultaneously strengthened the United Nations Humanitarian “Cluster” system of responding to emergencies, with a Health Cluster chaired by WHO, a WASH (Water, Sanitation and Hygiene) Cluster chaired by UNICEF, and formation of a new Logistics Cluster chaired by the World Food Programme (WFP). The new entity, the “C4” (Cholera Command and Control Centre), co-chaired by the MOHCW and WHO, was established to facilitate the scaling up of interventions to fight cholera and coordinate the work of a very wide range of agencies and NGOs providing critical support for implementation of the response in the form of finance, equipment, manpower, medicines and medical sundries. The C4 also coordinated the inputs of key technical expertise, including from the International Centre for Diarrhoeal Diseases Research in Bangladesh, the US Centers for Disease Control and the Global Outbreak Alert and Response Network. Resources were mobilized for the work of C4 and its partners from a variety of donors, including the African Development Bank, AusAid, Government of Botswana, Central Emergency Response Fund, United Kingdom Department for International Development, ECHO, Government of Greece, Republic of Korea, SIDA, OFDA/USAID, World Vision Australia, Canada and the USA.

The MOHCW acted as the focal point between both the C4 and the multisectoral government Task Force to ensure coordination of all actions across a wide range of government and nongovernmental agencies as shown in Figure 3.

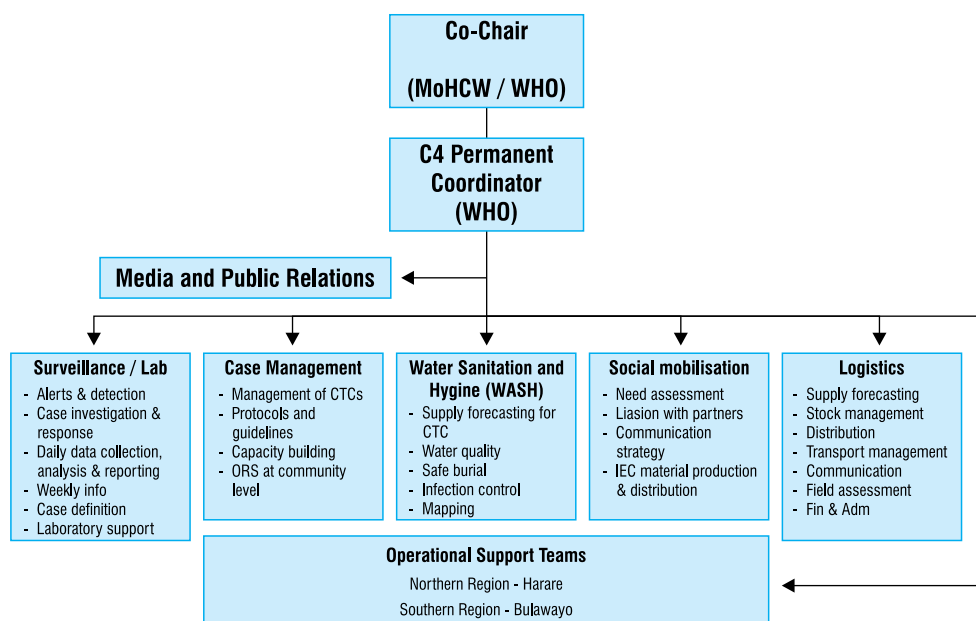
Figure 3: Relational context of the multisectoral coordination mechanisms



A number of different processes were required to take place simultaneously to address the challenges and these are described under the five thematic areas of the C4 response model, having been chosen by the MOHCW and WHO as the main strategic framework within which to fight the outbreak.

The core interventions decided upon were based around five main pillars identified within the C4, with the key objectives / tasks outlined within each pillar as shown in Figure 4 below:

Figure 4: Cholera Command and Control Centre's organizational structure



Source: Establishment of Cholera Command and Control Centre (C4) in Zimbabwe, Ministry of Health and Child Welfare, Zimbabwe, and the World Health Organization; December 2008.

While the C4 originally operated at the national level, it was also planned to have decentralized structures at provincial level to assist in lower-level coordination. However, the roll-out of the decentralized structures was delayed until March 2009. In the interim, provincial and district levels established or maintained their existing structures and plans for mobilizing resources and coordinating the response to an outbreak through revitalizing their disease control committees, civil protection committees or formation of new Cholera Action Committees (CACs) composed of all organizations operating at that level, which then developed local plans to manage the outbreak.

Surveillance/laboratory: Data on the cholera outbreak was initially not readily available although this changed following the declaration of cholera as a national emergency. Some partners had readily available resources (transport, fuel, phones) to collect and transmit data, and so had more up-to-date data than the MOHCW. The C4 helped to capture this information and use it to guide action. Key people involved in the surveillance data were the nursing staff, district medical officers, provincial and district health information officers, provincial medical directors, environmental health officers, environmental health technicians on motorbikes and the health information and surveillance unit of the Epidemiology and Disease Control Directorate. Official communication on the cholera outbreak was through the Minister of Health and designated offices of the PMDs and city

health departments in order to reduce confusion and panic through uncoordinated cholera statistics. Data from cholera treatment centres (CTC), districts and provinces was used to develop the weekly epidemiological bulletins that were posted on the WHO website. Stool samples were collected from selected patients to be sent for laboratory confirmation of cholera; however, challenges with regards to availability of transport means, physical transportation of specimens and generally reduced lab capacity presented an ongoing challenge and therefore limited the number of confirmed cholera cases in this outbreak.

Case management: Case management was initially un-standardized and, in some instances, based on old and outdated guidelines. Following this realization, appropriate case definitions and management protocols for the different clinical scenarios were developed and disseminated to the health facility and cholera treatment centres and units. At the height of this outbreak, up to 400 CTCs/CTUs had been established at hospitals, clinics and independent sites to increase access to care and so reduce deaths. These were set up by the MOHCW and, with the support of partners, had infection control as a key protocol to be followed.

Initially, essential items such as oral rehydration solution (ORS), IV fluids and antibiotics were not available or were inadequate in quantity due to the scale of the outbreak. This later improved with the support of partners and these improvements translated into a corresponding decrease in the CFR as the outbreak evolved. The prevailing shortage of manpower was addressed partially when some of the health workers returned to work to assist with the crisis but the shortage of skilled manpower persisted. The newly-qualified Primary Care Nurses were not competent to manage the case-load due to inadequate experience and training. While the government failed to pay allowances for the few health care workers manning the busy CTCs/CTUs, some donors and partners provided varying amounts for daily or weekly duties, and this caused discrepancies in the staffing rates at these centres.

WASH: The water and sanitation situation in the country was a key determinant causing and driving the outbreak. As such, the activities of the water sector were crucial in controlling the outbreak and preventing future outbreaks. The WASH Cluster enjoyed participation by over 100 partners who were engaged in assisting with water, sanitation and hygiene improvements at all levels, especially at grass-roots level. The members contributed to the improvement of safe water supplies in schools and health facilities, assessing CTCs, training of EHTs in infection control within CTCs, provision of non-food items (buckets, soap, aquatabs), assessing the availability of materials for water quality testing, providing emergency water supplies, and establishing a rapid response team in each province. A joint health-WASH social mobilization working group was formed with the goal of building capacity of individuals, families and communities to prevent cholera, launching a clean-up campaign in September 2009 in conjunction with the Ministry of Environment, with support from the Deputy Prime Minister under the theme “Celebrating a cholera-free Zimbabwe, celebrating a litter-free Zimbabwe”. Participatory hygiene and health education programmes were revitalized as a key intervention in preventing further outbreaks by targeting behavioural change at the community level. Support was also provided to improve urban water safety in Harare and other major cities as from February 2009, when UNICEF began donating water treatment chemicals to local authorities to enable safe water to be provided to residents. This support continued until mid-2012.

Addressing the water situation in the country requires a medium- to long-term development programme to address the pumping capacity, reticulation system, and the logistics of adequate water treatment chemicals. A number of studies and proposals for addressing these water supply challenges, particularly for urban areas, have been developed. However, the implementation of these plans requires resources for long-term financing. The same determinants of the cholera outbreak however, persist, with the country continuing to struggle in raising finance for large capital projects and some major donors unable to provide direct budgetary support to government for such projects.

Social mobilization: Social mobilization interventions were conducted during and after the outbreak, aimed at sensitizing communities on cholera, the actions to be taken and the preventive measures to be put in place. A running message on radio and TV was put in place prior to the declaration of the emergency, and following the declaration, the intensity of social mobilization increased and only scaled down as the outbreak came under control. A social mobilization committee was formed to provide technical guidance to the national cholera campaign. This committee included officers from the MOHCW Health Promotion Department, WHO, WASH cluster representatives, and the National Healthcare Trust of Zimbabwe to develop and review the IEC materials, including radio messages, cell phone messages, TV and print media. Massive health education campaigns were conducted by sending teams into villages and schools. The MOHCW also wrote to the education sector to make sure that primary and secondary schools were responsive to the water and sanitation measures and knew when to make contact with health workers promptly if needed. The Ministries of Youth, Local Government and Education were trained at all levels on cholera issues, and campaigns targeting the community were continuously given critical importance of sustained control. Communication was also conveyed to all involved that schools were not to be used as cholera treatment centres.

Logistics: Logistical support was crucial to the success of controlling the outbreak. Basic supplies including buckets and soap were inadequate in the country. It was noted by partners that a major challenge was inequitable distribution of resources, with supplies being delivered to one specific CTC rather than to the district hospital for onward equitable distribution to all CTCs in the vicinity. This partly resulted from the limited governance and oversight by the MOHCW, transport and fuel shortages which resulted in resources being delivered to the most accessible areas, with distribution of supplies not always in line with the severity of the outbreak in affected areas. Supplies were also frequently delayed in arriving from where they were being procured as a result of suppliers being overwhelmed and having insufficient stocks. This was further complicated by the raised costs of supplies due to import duty on supplies not organized through the MOHCW before the declaration of the outbreak as an emergency. However, the subsequent arrival of more donors greatly improved the situation in terms of supplies. Logistics clusters were put in place at decentralized levels with district-level stakeholders meeting frequently in order to share responsibilities and avoid duplication of effort in managing the logistics.

Resource allocation: Resources were mobilized from many sources, including from the Government of Zimbabwe/Reserve Bank of Zimbabwe, development partners, donors, bilateral agencies and NGOs. Donations were received both in “cash” and “in kind” in the form of commodities. All resources were managed in the first instance through NATPHARM, the national pharmaceutical storage and distribution facility. Logistical and financial support was provided to NATPHARM from C4, WFP, UNICEF and other partners

such as Medicines sans frontières (MSF). Logisticians and epidemiologists worked together to create a “formula” to quantify supplies needed by each CTC based on number of cases and other epidemiological data.

5. Cost

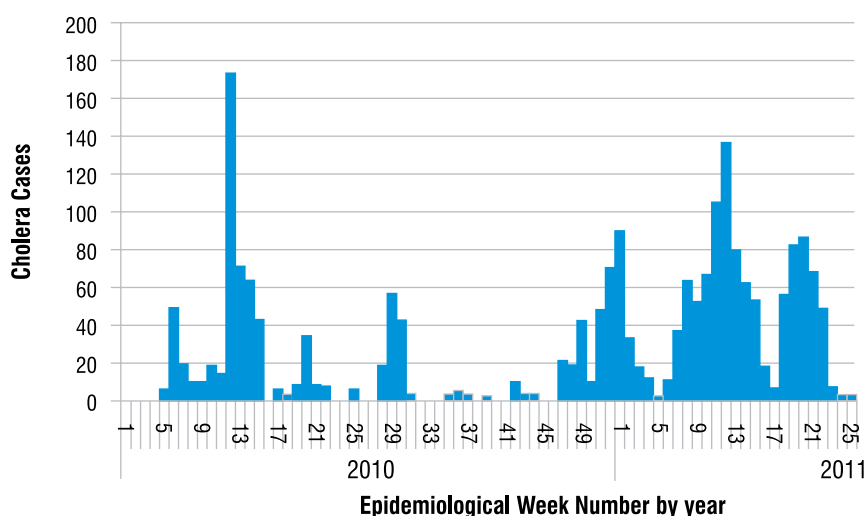
Estimating the total cost of the cholera outbreak of 2008/9 and the response is complex but important given the persisting determinants and likelihood of recurrence. However, this will require expertise considering the large number of governments, donors and stakeholders involved, the mixture of contributions in cash and in kind, as well as the prolonged time period of over three years. Contributions to the Health Cluster were estimated at US\$ 36.2 million in 2009³, but this does not include non-health cluster actions including contribution of Zimbabwe and other governments. The total cost of the response is, therefore, expected to be much higher.

Monitoring of cholera cases continues through the routine MOHCW surveillance system, which has managed to detect other smaller outbreaks following the massive 2008/9 outbreak. Training of health workers and communities in the WHO-recommended integrated disease surveillance and response (IDSR) is being continued. Data from this system is used to inform areas where priority action is needed to rapidly contain any outbreaks, with deployment of rapid response teams that have been trained by the MOHCW with support from WHO following the cholera outbreak.

IMPACT 1: Reduction in cholera cases

The health sector-specific and combined multisectoral efforts described here ultimately resulted in the control of the worst-ever cholera outbreak to hit Zimbabwe. This outbreak raged from end- August 2008 and was declared officially over on 26 July 2009. There have since been continued reports of sporadic outbreaks and the multisectoral measures put in place since December 2009 have enabled the country to bring about dramatic reductions in both cholera cases and deaths across the country. There have been no cholera cases reported from week 23 of 2011 to week 20 of 2012.

Figure 5. Cholera epidemic curve, Zimbabwe, from Week 5, 2010 to Week 26, 2011



Source: Ministry of Health and Child Welfare, Zimbabwe, Weekly Disease Surveillance System; August 2011

³ Health Cluster Bulletin No.15 2009 MOHCW, WHO

Improved awareness by people about cholera, improved behaviour towards personal hygiene including hand washing and improved environment in terms of safe water and sanitation resulted in improved quality and quantity of water being provided to some areas of the population. However, the CFR remained high and this may be due to delays in patients with cholera seeking care, particularly among certain religious groups, and unpredictability of outbreak spots.

IMPACT 2: Improved state of readiness

The country has learned and evolved a great deal as a result of the severe cholera outbreak. It was clear that the health system was overwhelmed by the sheer scale of the outbreak at the onset, and many lessons have been learned and systems established at national and sub-national levels to enable future response to disease outbreaks. This includes development of updated Integrated Disease Surveillance and Response (IDSR) guidelines; updated training modules for health workers; case management training for epidemic diarrhoeal diseases; Zimbabwe cholera control guidelines including guidelines on food hygiene; and training of Rapid Response Teams at district level⁴.

IMPACT 3: Harmonized action by multiple stakeholders

There is now much greater harmonization of action across both government and nongovernmental agencies, with all stakeholders using the same sets of guidelines under the leadership of the Department of Epidemiology and Disease Control in the MOHCW. Continued coordination is facilitated through the ongoing cluster system, although its transition towards a more development-oriented model is an ongoing discussion.

IMPACT 4: Strengthening of the health system

The health system was strengthened as a result of the actions of the MOHCW, the Health Cluster and other stakeholders, with improved medical and equipment supply to health institutions and an increase in community confidence in the health care system as the response to the outbreak progressed.

Data on changes in health inequities are hard to identify within available documentation. Routine data on cholera cases and deaths are disaggregated by age and place of residence but not by sex, wealth quintile, educational level, occupational level or other markers of potential inequity. This in itself reveals the future importance of gathering data that specifically explores potential inequities through deeper exploration of the distribution of disease. Key social determinants of health in Zimbabwe's cholera epidemic relate to hygiene practices, access to safe water and sanitation, poverty and the functionality of the health system itself. The general socioeconomic situation remains fragile, and while there have been improvements in the health system as a result of concerted efforts by the MOHCW and partners, the system remains weak in all pillars (human resources, health information, health financing, health service delivery, commodities and products). Funding for health from the central government and private sector donors remains low while disposable incomes remain poor.

⁴ Meeting on Preparedness, Detection, Alert and Response Strategy for Outbreaks, 28 - 29 April 2009, Elephant Hills Hotel, Victoria Falls, Zimbabwe.

Follow-up and lessons learnt

A number of key facilitators and barriers were observed in the response:

Facilitating factors in the response	Barriers in the response
<ul style="list-style-type: none"> • Convergence of purpose: all stakeholders united in their determination to avoid further loss of life • Changing of the political climate in February 2009 with the formation of the Government of National Unity • Change of currency: with dollarization to the US dollar, logistical issues were made easier 	<ul style="list-style-type: none"> • The health system was at its weakest, and weak in every pillar, at the onset and throughout the outbreak • Potential confusion with the large number of partners who had to be well-coordinated • Political situation at the onset of the outbreak affected communication, collaboration and funding • Low community capacity, knowledge and awareness

The outbreak was declared over on 26 July 2009 but stakeholders remained on high alert given the continued existence of predisposing factors in the social determinants of health. All relevant sectors continued working to prevent further outbreaks, in particular addressing the water and sanitation issues in which there has been an improvement over time, with increased supplies of clean water being provided across the country, particularly in urban areas. The structures put in place to manage the severe cholera outbreak remain to this day in an effort to continue controlling cholera which remains a threat. However, there have been important developments and transitioning of the objectives and the way work is done. For example:

The Ministry of Health and Child Welfare - The MOHCW stepped up training in Emergency Preparedness & Response (EPR), Integrated Disease Surveillance & Response (IDSR) and Rapid Response Teams (RRT) and ongoing social mobilization campaigns. The health system has seen progressive strengthening following the launch of the National Health Strategy 2009-2013, and resource mobilization through the development and launch of the Health Sector Investment Case.

The National Task Force on Epidemic-Prone Diseases – This group continued to meet monthly and now once quarterly and has a particular focus on addressing the issues of epidemic-prone diseases. Work is at an advanced stage of transforming this task force into a standing committee for both planning and response, while work is also at an advanced stage on the formulation of a policy, strategy and legislation for an enhanced Cabinet Committee for Disaster Risk Management. This will legislate for the standard response model used to control cholera, but will include an expanded platform in the command centre to enable inclusion of all stakeholders in the response (government departments, UN agencies, NGOs, private sector, churches, universities, etc.). This group has also been working hard with local authorities and ZINWA (Zimbabwe National Water Authority) and relevant ministries to improve the water and sanitation situation countrywide, although there is still a long way to go.

The C4 – The C4 continues to operate but now functions mainly in support of surveillance of cases and support to the MOHCW for rapid follow-up of any outbreaks, with staffing being scaled down to three people. At the same time, plans are in progress to transfer all functions of C4 to the MOHCW within a purpose-built Emergency Operations Centre (EOC) with funding from ECHO, with C4 functions continuing during the transition phase to ensure no gap in surveillance or capacity to respond quickly to outbreaks as needed.

It should also be noted that the unprecedented scope of the outbreak required innovative response mechanisms to be developed, and many of the tools and processes have already been shared at the international level (e.g. Zimbabwe's Cholera Command and Control Centre model was provided to Cameroon in 2010 to support them in their cholera outbreak; the C4 model has been disseminated and adapted in a number of locations, including Haiti).

While for now the cholera situation in the country is under control, future sustainability is dependent on successful national transition from an emergency funding mode to a comprehensive development platform that ensures all social determinants of health driving disease outbreaks are addressed in a sustainable manner in the longer term.

Key lessons on social determinants of health and cholera for Zimbabwe

- The Ministry of Health and Child Welfare must take the lead in coordinating a multisectoral response to disease outbreaks with social causes, and it needs to be mandated/supported to do so by the highest level of the government in its stewardship role.
- Responding to an outbreak requires addressing the health emergency at the same time as the determinants of health – stakeholders outside the health sector need to be identified, made aware of their responsibilities and given a central role in responding.
- Without a strong, well-responding health system including human resources for health, material supplies and raising community awareness, it is not possible to contain an epidemic.
- The emergency became an opportunity to work towards better preparedness in responding to future outbreaks using a multisectoral approach and better coordination.
- Data on health inequities and the social determinants of health need to be systematically gathered and documented as part of the ongoing work of the MOHCW.

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