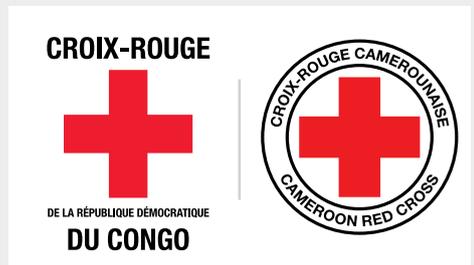




# COMMUNITY CHOLERA EPIDEMIC PREPAREDNESS IN THE DEMOCRATIC REPUBLIC OF THE CONGO AND CAMEROON

## Case Study

Community Epidemic and Pandemic Preparedness Programme  
July 2021





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## Acknowledgments

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## INTRODUCTION

Epidemic prevention, preparedness, early action and response is a top priority for the International Federation of Red Cross and Red Crescent Societies (IFRC). Containing an epidemic before it spreads uncontrollably saves lives, protects livelihoods and safeguards long-term development. National Red Cross and Red Crescent Societies can play a key role in epidemic risk management through their vast network of local branches and volunteers.

This case study examines the experience of the Community Epidemic and Pandemic Preparedness Programme (CP3) in the fight against cholera in Cameroon and the Democratic Republic of the Congo (DRC) in 2019 and 2020. Each country has its own context, specific characteristics, opportunities and challenges that influence the implementation of the programme. The study focuses on the activities carried out, the results achieved and lessons learned that can be applied to cholera programmes implemented in other areas at risk from the disease.

### What is cholera?



Cholera is a bacterial infection of the small intestine that can cause acute watery diarrhoea and severe dehydration. Without proper treatment, it is one of the deadliest infectious diseases. People who suffer the rapid loss of fluids and electrolytes as a result of the infection can die in a matter of hours if they do not receive prompt treatment. In addition to rapid access to proper treatment, other factors that contribute to preventing and controlling cholera epidemics are a safe water supply, adequate sanitation facilities, health and hygiene promotion, effective surveillance of the disease and an early warning system. In areas where drinking water is not protected from faecal contamination, cholera can spread rapidly through the population. It is communities themselves, when involved and trained in epidemic preparedness and response, that are best placed to detect and contain cholera epidemics, and their actions can save lives and lessen the adverse impact of the disease.

### Role of National Red Cross and Red Crescent Societies

In cholera-endemic countries, preparedness activities implemented by National Red Cross and Red Crescent Societies to combat cholera mainly involve the effective deployment of trained volunteers, the provision of water, sanitation and hygiene (WASH) facilities and the pre-positioning of cholera kits. If cases of acute watery diarrhoea are closely monitored, cholera epidemics can be detected at an early stage, allowing rapid treatment of patients in the community and timely referral of severe cases to health centres. This helps to prevent the spread of cholera and saves lives.

**Between 80% and 90% of cholera cases are mild or asymptomatic and can be treated in the community with oral rehydration therapy. This is a task that can be performed by trained, motivated volunteers.** Less than 20% of people who become infected will develop typical cholera with moderate to severe dehydration.

## Cholera outbreaks in Central and West Africa: number of suspected cholera cases<sup>1</sup> and deaths

	2020 Weeks 1 to 48			2019 Weeks 1 to 48		
	Cases	Deaths	Case fatality rate	Cases	Deaths	Case fatality rate
<b>DRC</b>	18,616	304	1.6%	27,875	483	1.7%
<b>Cameroon</b>	1,885	80	4.2%	788	38	4.8%
<b>Nigeria</b>	1,543	84	5.4%	2,548	13	0.5%
<b>Benin</b>	224	5	2.2%	45	0	0.0%
<b>Liberia</b>	96	2	2.1%	116	1	0.9%
<b>Togo</b>	2	0	0.0%	0	0	0.0%
<b>Central and West Africa</b>	22,366	475	2.1%	31,472	539	1.7%

### Highlights:<sup>2</sup>

- By week 48 of 2020, the region had recorded 22,366 cholera cases and 475 deaths (case fatality rate: 2.1%).
- The Congo Basin area, where the DRC is situated, was the most seriously affected area in 2020, with 18,616 notified cases, which was 83% of all cases reported in the region. This did, however, represent a significant fall in cases compared to 2018 and 2019.
- On the other hand, the Gulf of Guinea and Mano River Basin area, where Cameroon is situated, saw a rise in cases from 122 in 2018 to 322 in 2020.
- In the Lake Chad Basin area, there was a drastic drop in cases in 2019, and then little change from 2019 to 2020.
- In 2020, the DRC remained the country most seriously affected by cholera in the Central and West Africa region, followed by Cameroon.

## DRC



Since its resurgence in the African continent in 1970, cholera has steadily gained ground in the DRC. Since that time, cases of cholera have been reported every year. The annual case fatality rate for cholera is always above 1%, which is the threshold considered acceptable for this disease by the World Health Organization (WHO). Cholera is endemic in the DRC, and the most affected areas are generally those in the eastern part of the country and along the Great Lakes. However, during the rainy season, other parts of the country are also affected, such as Kinshasa and Kongo Central.<sup>3</sup>

## CAMEROON



In 2011, Cameroon suffered its worst cholera epidemic (22,762 suspected cases and 786 deaths) since the first cholera case appeared on 4 February 1971. There is an overall upward trend with annual case fatality rates well above 1%. In the period covered by the study, the main outbreaks occurred in the North and Far North regions in 2019 and in the Littoral region and the southern part of the country in 2020.

<sup>1</sup> The general approach for cholera diagnosis and surveillance is based on clinical examination for symptoms of acute watery diarrhoea suspected to be cholera. A laboratory culture or polymerase chain reaction (PCR) test needs to be performed on a stool sample to confirm the cholera diagnosis. However, such testing is not always available or possible for all suspected cases. WHO encourages countries to use its standard case definition for notifying cases of cholera, which stipulates that a case of cholera should be suspected when (a) in an area where the disease is not known to be present, a patient aged five years or more develops severe dehydration or dies from acute watery diarrhoea or (b) in an area where there is a cholera epidemic, a patient aged five years or more develops acute watery diarrhoea, with or without vomiting.

<sup>2</sup> Adapted from [https://reliefweb.int/sites/reliefweb.int/files/resources/WCA%20Cholera\\_Update\\_W1-48\\_2020.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/WCA%20Cholera_Update_W1-48_2020.pdf).

<sup>3</sup> They are type AB health districts, which means that they have periods of more than eight weeks with no cholera cases notified (metastable) and are situated outside cholera-prone areas (<https://reliefweb.int/map/democratic-republic-congo/cartographie-du-chol-ra-en-rdc-voies-probables-de-propagation-et>).

# CHOLERA PREPAREDNESS ACTIVITIES IN DRC AND CAMEROON

Since 2017, with the support of the United States Agency for International Development (USAID), the IFRC CP3 programme has been strengthening the ability of communities, National Societies and other key partners in eight target countries to prevent, detect and respond rapidly to disease risks. The programme's activities focus on three priorities:

- 1. Preparing communities** – ensuring they have basic information before outbreaks about the spread and seasonal incidence of diseases, how to prevent them, simple and effective systems for detecting outbreaks and communications mechanisms that ensure timely information-sharing and community engagement.
- 2. Preparing first responders** – strengthening the epidemic preparedness and response capacity of National Societies and helping them develop networks of trained volunteers to support early detection of cholera cases and rapid action to tackle cholera outbreaks.
- 3. Preparing other key actors** – mobilizing religious leaders, traditional leaders, healers, associations and the media for epidemic preparedness and response.

Although the programme proposes a multi-risk approach, this case study focuses on the advances made in tackling cholera, which is endemic in the DRC and Cameroon.

In the **DRC**, the health districts of Maluku and Mbinza Météo in the province of Kinshasa, and Kimpesé and Nsona Pangu in the province of Kongo Central were selected as target areas for the CP3 programme. These health districts are cholera hotspots, that is, they are densely populated areas or cities where cases surge and spread.

In **Cameroon**, the areas selected for the implementation of the CP3 programme are in the north and east of the country. The cholera preparedness and response activities are concentrated mainly in the north, in the departments of Bénoué and Mayo Rey, a very high-risk area for cholera outbreaks.

The main achievements of the programme in 2019 and 2020 are described below.



## Coordination with partners



Handwashing station set up by the International Organization for Migration, with the collaboration of the DRC Red Cross in Lufu, Kongo Central. DRC Red Cross, 2020

**Strengthening relations between National Societies, the International Federation, the Ministry of Health and other key partners** (including WHO, UNICEF and Doctors Without Borders): the National Societies take part in One Health platform coordination meetings and Global Health Security Agenda (GHSA) partners meetings. They also organize regular meetings with health centres in the areas covered by the programme.

In the DRC, the International Federation takes an active part in coordination meetings of the WASH, health and nutrition clusters and the Information Management Working Group (IMWG) led by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). The Cameroon Red Cross Society and the IFRC participate in periodic meetings held to develop the Strategic Action Plan for community-led action organized by the Ministry of Health. This plan involves effective Red Cross participation in the response, reporting cases and supporting Ministry of Health personnel in the search for new cases.



## Capacity strengthening



Awareness-raising session on risks and good practices for cholera prevention in Lufu, Kongo Central. DRC Red Cross, 2020

Under the programme, Red Cross members have been trained in:

- **community-based health and first aid, epidemic control and community engagement and accountability (CEA);**
- **community-based surveillance**, awareness-raising and early action in response to outbreaks;
- **cholera preparedness and response**, in particular oral rehydration therapy (ORT) and the setting up of oral rehydration points (ORPs);
- organization, facilitation and evaluation of a **mobile cinema** for communities.

Representatives of the media, the Ministry of Health, the Ministry of Agriculture and the Red Cross received training in **communication in emergencies** with the support of BBC Media Action.

In Cameroon, the National Society has also strengthened its national response team and updated its contingency plan to combat cholera in the North and Far North regions.

In the DRC, the Red Cross has trained three community disaster response teams (CDRTs), comprising local officials, religious leaders, traditional healers, other community leaders and local Red Cross branch leaders, in disaster risk management, including epidemics. In the province of Kongo Central, women's associations received training on how to prepare oral rehydration solution (ORS).



## Prevention, case detection and rapid response measures



Training in oral rehydration therapy and setting up oral rehydration points. Cameroon Red Cross, 2019

Red Cross volunteers carried out home visits, held handwashing demonstrations, organized mobile cinema sessions and put on a theatrical performance. Televised discussions and radio spots and shows in the local language were broadcast. Community leaders granted CP3 programme volunteers access to their communities and also played a prominent role, alongside volunteers, in carrying out awareness activities.

**Thanks to their regular presence in the community, volunteers trained by the programme detected cases meeting the community case definition of acute watery diarrhoea** and notified the nearest health centres (1,914 cases in the DRC and 387 in Cameroon). In Cameroon, volunteers supported the Ministry of Health in the search for cases. In the DRC, suspected cholera cases were diagnosed in clinical examination operations jointly led by the health district's chief medical officer and the CP3 programme's provincial supervisor, following Ministry of Health recommendations. In the two countries, depending on the severity of the case, volunteers either administered ORS or referred and accompanied patients to a health centre where they got the treatment they needed.

The awareness campaign has increased knowledge of the signs and symptoms of cholera and implementation of good hygiene and sanitation practices in the community.

## CHOLERA RESPONSE – CAMEROON



Cameroon Red Cross volunteers raising awareness about diarrhoeal diseases in Bénoué (North region).  
Cameroon Red Cross, 2019

A **cholera outbreak** occurred in August **2019 in the North region** (1,176 cumulative suspected cases in October, with 62 deaths). The CP3 programme volunteers deployed on the ground immediately alerted the health authorities and, under the supervision of the Ministry of Health, intensified the active search for cases and stepped up activities in affected communities to raise awareness about the risk of cholera and about preventive measures. They increased WASH activities, including handwashing demonstrations, disinfection and spraying with chlorine in households and environmental clean-up days. Efforts were also undertaken to promote large-scale community mobilization with the main stakeholders. This was supported by radio stations, with the broadcast of spots and shows on health issues in the local language. Following the participation of CP3 programme volunteers in the epidemic response activities, the regional public health representative for the North region congratulated the **Cameroon Red Cross on the leading role it plays through its volunteers in the fight against cholera epidemics**, recognizing its status as a major player in the region.



*“As spokesperson for the Ministry of Public Health in the North region, I can assure you that we greatly appreciate the efforts you undertake on a daily basis to help us achieve our goals, and we’re proud to count you among our valued partners.”*

Regional public health representative for the North region

In **June 2020, a cholera epidemic was declared in the south of the country**, in the Littoral region. Technical assistance was provided for the treatment of cases of mild dehydration in the community and the referral of severe cases so that the region's volunteers could support the response.

From 1 to 5 August 2020, the Cameroon Red Cross also provided support to the Ministry of Health for the **cholera outbreak response vaccination campaign** carried out in the Littoral, South and South-West regions. National Society volunteers supported social mobilization activities aimed at informing households about the campaign before the visit from the vaccination teams and during the vaccination operation itself. The Cameroon Red Cross regularly provides such support during the Ministry of Health's vaccination campaigns.



Practical exercise to set up an oral rehydration point. Cameroon Red Cross, 2019



Raising community awareness about water point hygiene, village of Pomla Manga (Gaschiga, North region). Cameroon Red Cross, 2019



Practical mobile cinema session in the Mandjou community (Bertoua, East region). Cameroon Red Cross, 2019

## CHOLERA RESPONSE – DRC



*Setting up an oral rehydration point in Lufu, Kongo Central  
DRC Red Cross 2020*

### **The Red Cross of the Democratic Republic of the Congo played an active part in the response to the cholera outbreak in June 2020 in Lufu (Kongo Central).**

Lufu is on the border with Angola and is a busy crossing point. The area's infrastructure is, however, sorely lacking and unable to cope with the hygiene and sanitation problems caused by the daily stream of people. Access to clean water is poor, and open defecation is common practice.

It was in this context, presenting ideal conditions for cholera to thrive, that an outbreak occurred in June 2020. The CP3 programme stepped up **activities to raise awareness** about risks and good practices for prevention and gave demonstrations on techniques for making water safe to drink and for preparing ORS. A local **radio station** devoted a weekly slot to **cholera prevention and control** in the local language. The Red Cross carried out activities including the **chlorination** of 10 water points, the distribution of 14,000 **Aquatabs**, the **purification** of 1,012 jerry cans of water and the **disinfection** of 330 public and private places.

The volunteers also took part in the active search for cases of acute watery diarrhoea **meeting the community case definition and reported those detected to health centres.**

The Lufu Red Cross branch carried out its first **rapid ORP installation** to provide rehydration in mild cases and referred severe cases to health centres, providing ORT during the transfer. A total of 43 patients suffering from acute watery diarrhoea were seen between 20 June and 30 July 2020. The National Society was asked to perform nine **safe burials.**

The IFRC carried out **advocacy** activities aimed at **mobilizing its partners**, with the publication of three information bulletins aimed at raising awareness about the neglected but recurring risk of cholera in Kongo Central.

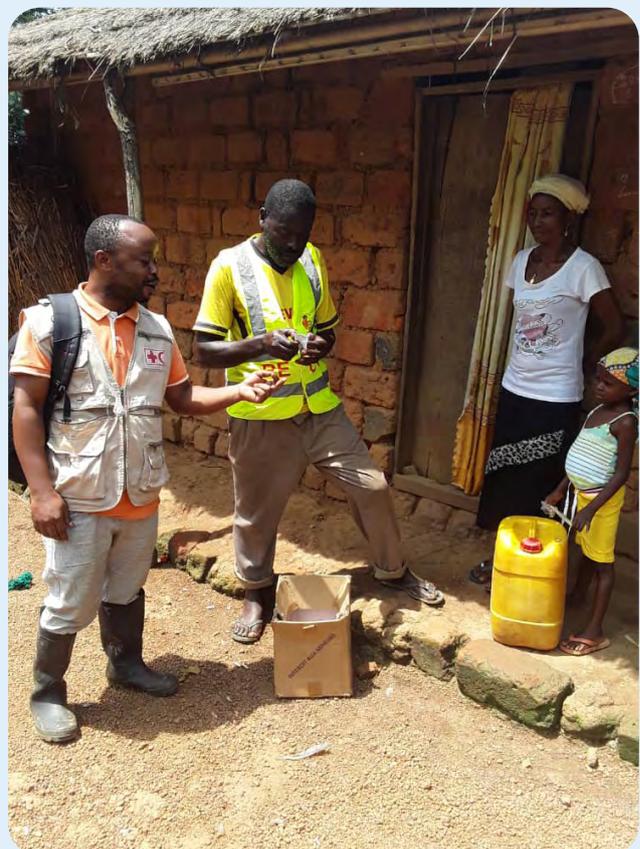
Following the response in Lufu, the DRC Red Cross **contingency plan** is now being finalized, and micro-plans for Kongo Central and Kinshasa will be completed shortly.



A community water point at the central market in Lufu, Kongo Central. DRC Red Cross, 2020



Chlorination of a water point. DRC Red Cross, 2020



Distribution of Aquatabs in the village of Lufu. DRC Red Cross, 2020

## LESSONS LEARNED

- In **strategies** aimed at combating cholera, community preparedness must be holistic and include measures for **WASH, health promotion** and **community cholera case management**.
- **Well-trained, motivated volunteers** who raise the awareness of community members about the signs and symptoms of acute watery diarrhoea, the seasonal incidence of cholera and the need to report cases of acute watery diarrhoea to volunteers or health centres as quickly as possible play a crucial role in the fight against cholera.
- **Treatment of cases of acute watery diarrhoea in the community** by volunteers strengthens **community-based surveillance** because it means that they are aware of any significant rise in cases in the community and can immediately alert the health authorities. This approach involves both immediate treatment and early warning.
- With **close monitoring** of notified cases and the source of infection and continuous assessment, it is possible to act rapidly to contain the disease, limit its spread and reduce mortality.
- **Data collection and updating** during an outbreak allows its progress to be tracked and permits continuous assessment of the situation in order to adjust the response accordingly.
- **Regularly updated contingency plans** facilitate very rapid implementation based on a set of predetermined procedures, effective coordination among the partners and early resource mobilization.
- A **rapid response** makes all the difference when a cholera outbreak occurs. Setting up ORPs significantly increases the effectiveness of the response and contributes to saving lives and containing the epidemic. To ensure that ORPs can be set up quickly, the personnel deployed for the task must have been previously trained and cholera kits must be pre-positioned in critical areas.
- **The creation of and support for informal learning and information-sharing mechanisms** can make an important contribution. Following a regional training of trainers course in ORT organized by the IFRC's Regional Office in March 2020 in Niamey (Niger), a WhatsApp group was created. This group was used to share information to facilitate the cholera response in Cameroon and later in the DRC too. It proved very useful during the 2020 outbreaks. Real-time information-sharing between the two countries supported decision-making by those in charge of operations at the National Society branches involved in the response. The facilitators have continued to provide technical support to those who took part in the training months after the event.
- From April 2020, with the onset of the **COVID-19 pandemic**, a focus on raising awareness about the virus has resulted in a reduction in other CP3 programme activities. However, all the barrier measures adopted to decontaminate and disinfect neighbourhoods and busy public places (markets, restaurants, bus terminals, etc.), the distribution of soap and hydroalcoholic gel and handwashing demonstrations by volunteers in collaboration with health-care personnel and hygiene promoters from the health districts have also contributed to preventing cholera.
- Thanks to a **partnership with the media**, prevention messages in the local language were promoted throughout the year in all communities prone to cholera, and communication was intensified during outbreaks.

## MAIN CHALLENGES AND RECOMMENDATIONS

- **Notified cases are not always investigated** by the health authorities. Advocacy with the Ministry of Health is needed to ensure effective follow-up of notifications.
- **The network of volunteers with ORT and ORP training should be extended to all areas at high risk from cholera.** National Societies do not have enough volunteers in high-risk areas. It is therefore important to train more of them and keep them motivated and engaged.
- For National Societies to play a significant role in the fight against cholera, they need to **strengthen the ability of their branch and headquarters volunteers and staff to take action at the community level.** Training for volunteers and staff must take place at times when response operations are not in progress. The main task of National Societies is community management of cholera cases, and the way to save most lives is to have effective case management capacity in the community, including ORT administration when there is no epidemic and the setting up of ORPs when outbreaks occur. When implemented effectively and on a large scale, such measures can lessen the severity and impact of an epidemic.
- ORS treatment in the community saves lives and reduces the movement of people suspected to be infected with the disease. **It is crucial to ensure that ORS sachets are available in communities.** To this end, advocacy could be carried out with WHO and UNICEF as potential suppliers.
- **The pre-positioning of ORP kits at branches in high-risk areas** allows early action. If this is not done, the response can come too late to make a difference. **It may also be necessary to have a contingency fund** for cholera outbreaks.

## CONCLUSION

While the two National Societies covered by this case study have had different cholera epidemic preparedness and response experiences, both have improved their ability to respond to cholera outbreaks.

**The National Societies have proved their ability to implement cholera prevention, preparedness and response activities.** In view of the results achieved, thanks to the commitment and dedication of its volunteers, the Red Cross was unanimously recognized by the other actors involved as a key partner in this field. This has raised its visibility among its partners and other actors and strengthened its role as auxiliary to the public authorities.

**It is crucial to strengthen National Society branches.** Effective coordination between National Society headquarters and branches, investing in initial and continuing training for branches and providing them with the required equipment and materials are good practices that must be maintained and strengthened. The effectiveness of branch volunteers in cholera outbreaks can be explained by the fact that they are supporting their own communities. Cholera kits pre-positioned in critical areas allow rapid action to be taken when an outbreak occurs, and that saves lives.

## Useful resources

- IFRC, Epidemic Control for Volunteers:
  - A training manual: <https://media.ifrc.org/ifrc/document/ifrc-epidemic-control-for-volunteers-training-manual/>
  - Toolkit: <https://media.ifrc.org/ifrc/document/ifrc-epidemic-control-for-volunteers-toolkit/> ;  
online version: <https://ifrcgo.org/ecv-toolkit/>
- IFRC Community-based health and first aid: <https://ecbhfa.ifrc.org>
- International Red Cross and Red Crescent Movement hub for community engagement and accountability: <https://communityengagementhub.org/>
- Humanitarian Data Exchange – Cameroon: <https://data.humdata.org/group/cmr>
- Humanitarian Data Exchange – DRC: <https://data.humdata.org/group/cod>
- Global Task Force on Cholera Control (GTFCC): <https://www.gtfcc.org/>
- Ending Cholera: A Global Roadmap to 2030: <https://reliefweb.int/report/world/ending-cholera-global-roadmap-2030>
- Cholera App: <https://www.gtfcc.org/cholera-app>
- Field manual for cholera outbreak response: <https://choleraoutbreak.org/>
- Guidance and tool for countries to identify priority areas for intervention: <https://www.gtfcc.org/wp-content/uploads/2019/11/guidance-and-tool-for-countries-to-identify-priority-areas-for-intervention.pdf>
- GTFCC tool for identification of cholera hotspots: [https://plos.figshare.com/articles/dataset/The\\_GTFCC\\_tool\\_for\\_identification\\_of\\_cholera\\_hotspots\\_/13610925/1](https://plos.figshare.com/articles/dataset/The_GTFCC_tool_for_identification_of_cholera_hotspots_/13610925/1)
- Cholera Platform: <https://www.platforamecholera.info/>
- GRID3: <https://grid3.org/>



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