Copyright
© Action Contre la Faim, member of the ACF International Network (ACF), 2012.

Reproduction is permitted providing the source is credited, unless otherwise specified. If reproduction or use of textual and multimedia data (sound, images, software, etc.) are submitted for prior authorization, such authorisation will cancel the general authorisation described above and will clearly indicate any restrictions on use.

Non-responsibility clause
The present document aims to provide public access to information concerning the actions and policies of Action contre la Faim International Network. Our objective is to disseminate information that is accurate and up-to-date on the day it was initiated. We will make every effort to correct any errors that are brought to our attention. However, ACF bears no responsibility for information contained in the present document. This information:

- is solely intended to provide general information and does not focus on the particular situation of any physical person, or person holding any specific moral opinion;
- is not necessarily complete, exhaustive, exact or up-to-date;
- sometimes refers to external documents or sites over which ACF has no control and for which ACF declines all responsibility;
- does not constitute legal advice.

The present non-responsibility clause is not aimed at limiting ACF’s responsibility contrary to requirements of applicable national legislation, or at denying responsibility in cases where this cannot be done in view of the same legislation.
SUMMARY

ACRONYMS

INTRODUCTION

1. PREPAREDNESS TO ANTICIPATE A CHOLERA OUTBREAK

1.1. Understanding the context
1.2. Contingency planning: technical, logistic, staff training, human resources, admin and external coordination
1.3. Coordination (epidemiologic surveillance)

2. PREVENTION AND CONTROL DURING AN EPIDEMIC OUTBREAK

2.1. Objectives of the intervention
2.2. Activities recommended - How can cholera be prevented?

3. THE POST EPIDEMIC – WHAT KIND OF ACF PROGRAMS IN ENDEMIC AREAS

REFERENCES
## MAIN ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACF</td>
<td>Action contre la Faim</td>
</tr>
<tr>
<td>AWD</td>
<td>Acute Watery Diarrhoea</td>
</tr>
<tr>
<td>CP&amp;MH</td>
<td>Care Practices &amp; Mental Health</td>
</tr>
<tr>
<td>EPRP</td>
<td>Emergency preparedness and response plan</td>
</tr>
<tr>
<td>FDA</td>
<td>US Food and Drug Administration</td>
</tr>
<tr>
<td>IDP</td>
<td>Internal displaced populations</td>
</tr>
<tr>
<td>INGO</td>
<td>International non-governmental organisation</td>
</tr>
<tr>
<td>MSF</td>
<td>Médecins Sans Frontières</td>
</tr>
<tr>
<td>WaSH</td>
<td>Water, Sanitation and Hygiene</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
</tbody>
</table>
INTRODUCTION

Cholera is a highly contagious yet easily preventable and treatable disease leading to more than 5 million people affected every year and around 120 000 deaths (WHO, 2011). Also called the disease of dirty hands, it is prone to develop anywhere in the world where water supply, sanitation, food safety and hygiene are inadequate.

In some developing countries, cholera can represent an acute public health issue that can cause many deaths rapidly. Indeed, as the incubation period is short (from 2 to 5 days), the epidemic can spread widely depending on the areas and the health conditions of the host population. Cholera can affect men, women and children; though it is important to highlight that it disproportionately affects immuno-compromised individuals, such as those suffering from under-nutrition.

Thus, Action contre la Faim International, as an organization whose vocation is to save lives by combating hunger, disease and those crises threatening lives of helpless men, women and children, is mandated to respond to cholera outbreaks. This paper aims at clarifying the nature of ACF intervention and their objectives.

A multidisciplinary approach based on prevention, preparedness and response, along with an efficient surveillance system, is essential for mitigating cholera outbreaks, controlling cholera in endemic areas and reducing deaths.

Medical actors are usually present and effective in responding to cholera outbreaks. The area in which ACF is highly effective and has a great experience is in hygiene promotion, education on cholera transmission routes, safe water distribution, and provision and rehabilitation of WaSH services. Moreover, based on the experience in Haiti, ACF team developed expertise on the adaptation of cholera prevention messages to the cultural beliefs, prevention of stigma due to cholera, psychosocial and psychological support for patients and their families by training medical teams on these aspects.

ACF International acknowledges the added value of cholera prevention activities through the implementation of WaSH programmes complemented by psychosocial care practices according to the context. Thus ACF International will focus its activities on preparedness and prevention to limit the spread of cholera, and for the time being, will withhold medical interventions in Cholera Treatment Centre, although this could be envisaged in future years.

In addition to this operational positioning paper, a cholera tool box is available to support implementation of cholera programs.
Map 1: Countries reporting cholera in 2010
Carte 1: Pays ayant déclaré des cas de choléra en 2010

The boundaries and names on these maps do not imply the expression of any opinion whatsoever on the part of the Johns Hopkins University concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there was no written agreement.

Les appellations, entités et frontières sur ces cartes n’indiquent en aucun cas l’opinion de la Johns Hopkins University concernant le statut juridique de n’importe quel pays, territoire, ville ou zone ou de ses autorités ou des frontières qui en découlent. Les lignes pointillées sur les cartes représentent des frontières approximatives pour lesquelles il n’y a pas d’accord écrit.

In 2010, we helped 6.4 million people.
Preparedness to anticipate a cholera outbreak
1. Preparedness to anticipate a cholera outbreak

1.1. Understanding the context

Cholera can lead very rapidly to massive outbreaks depending on several factors: demographic, cultural, geographic and socioeconomic elements, the sanitary living conditions of the population, and epidemiologic factors. Understanding and analysing those risks factors will support the intervention by specifying the populations or areas at greater risk, by identifying the potential transmission paths, and by giving an overview of the sanitary situation that will favour the epidemic to spread.

A review of the past outbreaks can give crucial information and help the teams understand the future epidemic pattern and anticipate the possible outbreak locations and timeframe. Past reviews have shown for instance that a massive epidemic occurred in Chad in 1997 and had the same transmission pattern as that in 2010. Knowing this earlier could have helped in planning prevention activities in some locations and hence being more effective in combatting the global epidemic trend.

In Haiti, no cholera outbreak has occurred for the last 100 years. Therefore, considering the people’s lack of knowledge, the mission team figured that the propagation would spread without biological limitation as the Haitian population never developed natural immunity to the disease.

It is essential to understand the nature of the outbreak as quickly as possible, in order to respond and prevent in the most effective and efficient way. To do so, operational research is required, and may cover different domains including the following: anthropology (to understand inter-personal transmission modes); hydrology and environmental issues (to understand hydric transmission routes); microbiology (identification of serotypes and sanctuaries of the disease); as well as epidemiology (spatio-temporal understanding of the outbreak).

1.2. Contingency planning: technical, logistic, staff training, human resources, admin and external coordination

In cholera endemic areas and where epidemics are recurrent, ACF missions will have to prepare one dedicated contingency plan, depending on the overall capacities of the country to cope.

As aforementioned, before any further involvement, it is important to assess the epidemiological context: the underlying causes of past epidemics, the quality of data collection in health centres and reporting to the Ministry of Health and WHO, the readiness and capacity of response of local authorities and external actors. Generally, this analysis will be undertaken by the health and nutrition department, to benefit from their relationship with the Ministry of Health and their involvement in medical structures at the local level.

Finally, looking at the findings of this assessment, the mission will decide on the necessity for ACF to develop its own response capacity, notably through elaborating a cholera contingency plan.

Cholera outbreaks demand quick and effective response. Responding to epidemics implies that the mission (and the headquarters) will allocate rapidly available and trained human resources, develop higher logistic capacities on ground and design an adequate programme based on the needs and in coordination with external actors.

ACF is undoubtedly a key player in today’s fight against hunger. Nevertheless, it needs to deepen and reinforce its medical culture for intervention, essential while working in an epidemic response. Through the process of developing a cholera contingency plan, the mission teams will improve their medical understanding of the disease using existing briefing materials developed in the cholera toolbox¹, enabling their ability to properly respond to an epidemic.

¹ - http://www.missions-acf.org/kitemergency/HTML_STATIC/homepageEN.html
The cholera contingency plan should contain:

- **The epidemiological context analysis**: definition of an epidemic regarding the mission context, thresholds, past epidemic trends, tools to monitor the situation (with a specific focus on the period between epidemics), time for deployment and exit strategy conditions;

- **The technical recommendations**: description and design of the activities to implement in case of an outbreak, mapping of the sensitive areas, the cholera toolbox elaborated on the lessons learnt from ACF’s past cholera programs (already existing and to be adapted to the mission context);

- **The logistic plan of action**: contingency stock, freight, supplier and infrastructures;

- **The human resources dedicated to the emergency**: the mechanisms to activate the ACF emergency teams -on a current mission-, staff pre-identified and trained while in the contingency planning process, explaining what their tasks and responsibilities will be;

- **The protection/prevention measures** for the whole mission team (national and international staff - the cholera team and the regular team);

- **The analysis** on what impact a cholera epidemic could have on the other regular programs and the according adjustment;

- **The financial plan**: pre-identifying donors, contingency planning included into regular budgets, available money to launch the activities on the first days - initial assessment -;

- **The coordination plan**: national plan, identification of the other actors and if relevant, establishment of Memorandums of Understanding to delineate the role and responsibilities of each partner, the quality of the epidemic surveillance and the outbreak detection and confirmation process.

A contingency plan will decrease significantly the delay in implementing response activities on ground and therefore, this is a crucial step towards increasing effectiveness and efficiency in a cholera epidemic.

1.3. **Coordination (epidemiologic surveillance)**

“As soon as there is indication of adults dying from acute watery diarrhoea, in endemic or non-endemic areas, the alert must be systematically triggered and followed by an exploratory mission.

A cholera outbreak is defined as an unusual increase in new cases:

- If no data exists, a doubling of the number of cases over 3 consecutive weeks.

- If data from previous years are available (per month or per week) in non-epidemic periods. Double this non-epidemic average indicates risk of outbreak.” (MSF, 2004)

Cholera is a highly contagious disease that spreads very rapidly throughout an area. Therefore, the key to prevent its transmission effectively and efficiently relies on both the speed at which the first cases and their origins are reported, and the speed of implementation of activities with the objective of containing the epidemic.
In accordance with ACF’s willingness to support national and local health authorities, **ACF will collaborate with the ministry of health in promoting an early warning system and on implementing effective daily reporting of cholera cases from health centres.** Gathering all the databases, complete epidemic surveillance will be undertaken and will give precious analyses to design prevention and control activities. Furthermore, in the event of a trans-border epidemic, ACF will also be able to ease coordination thanks to its means and to the possibility of having a mission in each country.

In endemic areas, outside of an epidemic period, **ACF can help support the surveillance system** by providing materials and training at the community health level, in order to ensure an effective and relevant follow up of future epidemics.

Health centres need cholera admission registers to properly record all entries in order to improve epidemic surveillance and follow-up. Furthermore, depending on the context, **ACF can provide materials** to collect and preserve the stools for proper analysis to confirm the outbreak. Again, if relevant, health centres in endemic areas will benefit from **rapid cholera tests** so as to shorten the time for outbreak acknowledgement. Providing this kind of support will depend on the previous needs assessment, the capacity and the expertise of the mission teams, and the opportunity to support the Ministry of Health.

**Lessons learnt from Chad – a good illustration of what can be done in cholera detection.**

In collaboration with international partners, the cholera team worked on capacity building at local and national levels. For example, it provided sample materials and technical training on how to collect and preserve the stools at local level. On top of that, it engaged its logistics to send stools for analyses in the capital and abroad, in France. Moreover, the team supported data collection at local level and epidemiologic surveillance and analyses at national level. ACF provided cholera admission registers and training on how to report the cases. In collaboration with the Ministry of Health, a database was elaborated to ensure proper epidemiologic surveillance.

Finally, thanks to this work, the mission team managed to participate in a retrospective epidemiologic study in this region (Chad, Nigeria, Niger, and Cameroon) which provided very useful information and understanding on how cholera spread in the area.
Prevention and control during an epidemic outbreak
2. Prevention and control during an epidemic outbreak

Although ACF’s response will surely not aim at covering all cholera transmission paths, designing the program will be based on a thorough analysis of the epidemic pattern. As for any ACF program, the mission will advocate for working in partnership – local and/or international – so as to quickly tackle the epidemic by implementing a complete prevention and medical response program (see the diagram below).

2.1. Objectives of the intervention

The cholera response is designed based on the epidemic pattern. Thus, the strategy does not aim at defining a unique and static program, but a wide range of activities which lead to developing the most appropriate and effective response. Documentation of past experiences, compiled in the cholera toolbox, will help design the appropriate response.

Lastly, it is acknowledged that ACF has a real added value on cholera prevention activities, although very limited capacities to take in charge directly a cholera medical response. For now, the latter will have to be coordinated with other local and/or international partners (international NGOs in great epidemics). Depending on the needs and expertise, the organisation will consider getting involved in local health facilities, but only improving psychosocial care and care practices (please refer to previous psychosocial care practices activities documented from Haiti cholera 2010-11) and WASH infrastructure. These local health institutions could also benefit from medical and hygiene staff trainings, donation of basic materials, and eventually facilitating their logistic (medical freight) from capital to remote areas.

Therefore, the nature of ACF intervention will focus on epidemic surveillance and cholera prevention through the implementation of water, sanitation and hygiene programmes, and eventually psychosocial support for medical staffs and/or population. However, it is acknowledged that the mid-term objective is to develop the internal capacities needed so that ACF mission could respond in the future also to cholera case management. Moreover, to ensure greater reactivity in the response, good internal coordination and the active collaboration from all the support departments are compulsory: logistic, human resources, administration and finance, communication and training.

2.2. Activities recommended - How can cholera be prevented?

ACF acknowledges the crucial need for proper epidemiologic surveillance and hence encourages its mission teams to work closely with the coordination structure that follows cholera outbreaks. If this entity needs to be supported in terms of data collection, analyses or materials, ACF is positioned to support this task as it will impact directly on the project design and its effectiveness.
CHOLERA OPERATIONAL POSITIONING PAPER

SHORT TERM:
• Support in epidemiologic surveillance at local and regional levels and monitoring of the needs;
• Implementation of WaSH and CP activities in support of local partners.
• Inclusion of cholera awareness in the different ACF programmes

LONG TERM:
• Include cholera prevention in mission strategy to reduce vulnerability.

SHORT TERM:
• Epidemiologic surveillance at local and regional levels;
• Direct implementation of WaSH activities on cholera prevention.
  • If needed, develop psychosocial and care practices activities in health centres in support of external actor working on medical care and/or in communities;
  • Cholera contingency planning.

LONG TERM:
• Include cholera prevention in mission strategy to reduce the number of population at risk and to build local authorities’ capacity.

SHORT TERM:
• Epidemiologic surveillance at local and regional levels and monitoring of the needs;
• Direct implementation of WaSH and CP activities on cholera prevention;
  • In health centres, improvement of wash infrastructure, training of medical staff on hygiene management and improvement of psychosocial issues and care practices;
  • Advocacy for the coming of medical INGOs if needed;
  • Cholera contingency planning.

LONG TERM:
• Include cholera prevention in mission strategy to reduce vulnerability and build capacity of local authorities.

SHORT TERM:
• Direct implementation or in partnership of WaSH and CP activities.
• In Health centres, material donation and training to the medical staff on hygiene management and improvement of psychosocial issues and care practices;
• AWD contingency planning.

LONG TERM:
• Advocacy to improve the access to vulnerable population towards the local/national authorities.

No programmatic response possible. Develop advocacy policy to gain access to the populations at risk of AWD, to the local/national authorities.

Cholera Outbreak activity diagram:
Significant increase in number of cases of Acute Watery Diarrhoea (AWD) - Suspection of cholera

The ACF mission actively monitors the number of cases, and gathers all the information available. Is the area endemic? This will help estimate the population's level of awareness, knowing that, on the one hand, in non-endemic areas, medical staff will not be properly trained; and on the other hand, in endemic areas, population's awareness will be clearly higher but not necessarily of good quality (taboos, beliefs, etc.)

YES

Is there Biological confirmation of cholera?

NON OFFICIAL CONFIRMATION OF CHOLERA EPIDEMICS AT COUNTRY LEVEL

Special cholera cluster meeting led by the MoH, supported by WHO

YES

Official recognition and declaration of cholera outbreak

Is there at least an official communication of the figures of AWD in a health cluster?

NON OFFICIAL CONFIRMATION OF CHOLERA EPIDEMICS AT COUNTRY LEVEL

External actors’ capacities and readiness?

SUFFICIENT

The access to populations at risk may be allowed either directly or through local partners.

NO

Officials are blocking all the information and especially epidemiologic data and location, preventing the implementation of any response.

SHORT TERM:
• Support in epidemiologic surveillance at local and regional levels and monitoring of the needs;
• Implementation of WaSH and CP activities in support of local partners.
• Inclusion of cholera awareness in the different ACF programmes

LONG TERM:
• Include cholera prevention in mission strategy to reduce vulnerability.

SHORT TERM:
• Epidemiologic surveillance at local and regional levels;
• Direct implementation of WaSH activities on cholera prevention.
  • If needed, develop psychosocial and care practices activities in health centres in support of external actor working on medical care and/or in communities;
  • Cholera contingency planning.

LONG TERM:
• Include cholera prevention in mission strategy to reduce the number of population at risk and to build local authorities’ capacity.

SHORT TERM:
• Epidemiologic surveillance at local and regional levels and monitoring of the needs;
• Direct implementation of WaSH and CP activities on cholera prevention;
  • In health centres, improvement of wash infrastructure, training of medical staff on hygiene management and improvement of psychosocial issues and care practices;
  • Advocacy for the coming of medical INGOs if needed;
  • Cholera contingency planning.

LONG TERM:
• Include cholera prevention in mission strategy to reduce vulnerability and build capacity of local authorities.
In terms of mitigation activities, ACF will recommend:

- To ensure access to safe water (according to SPHERE Standards): either at the household level through the distribution of solely chlorine or chlorine combined with a flocculation product (aquatab®, PUR®, watermaker®, etc.), and/or safe water distribution (installation of pumping stations with water trucking, chlorination of water networks, chlorination at the water points, etc.);

- To distribute cholera prevention kits (Hygiene kits) at the household level in the affected and at risk areas. These distributions should be accompanied with intensive and extensive cholera prevention sensitization. The kits are composed of soap, water disinfection product, and any other relevant item depending on the context;

- To analyse cultural beliefs on cholera and to adapt the approach to beliefs for improving the prevention through group discussion in communities and in health centres. The activities will then depend of the analysis; it can be conducting group discussions for avoiding stigma or/and encouraging people for seeking for treatment, providing psychosocial support after mourning, etc.;

- To disinfect public places (markets, schools, public toilets, etc.) and the houses of choleric patients by spraying chlorine solutions. Depending on the context and the operational means available, the latter might be hard to implement causing a problem of stigmatization of the choleric patients and/or be of low efficiency;

- To limit the transmission of cholera in and out of the health structures: providing materials (buckets, chlorine, cleaning materials, sprayers, pediluvium, etc.) and training for their human resources on hygiene management of the cholera unit, and on cholera cases psychosocial support and care practices management;

- And, to ensure, as a provider of last resort, materials and training to the communal agents so as to guarantee a secure management of dead bodies in remote areas.

Except in confined areas such as IDP settlements or camps, building public latrines are not recommended, as it is generally too time consuming to be an effective response during an epidemic. Moreover, it would require employing daily workers to clean the toilet and make sure that the place is secure and does not become another path of transmission.
The post epidemic - what kind of ACF programs in endemic areas
3. The post epidemic - what kind of ACF programs in endemic areas

“Cholera is now endemic in many countries”, stated WHO writing on the 7th on-going pandemic. Outside of epidemics, cholera has natural reservoirs to live in and epidemics will appear depending on environmental and social factors.

**Example:** Indeed, recent studies have shown that the importance of these environmental reservoirs is relying on the sanitary conditions of the communities. To illustrate this statement, environmental studies suggested that strains of *Vibrio cholerae* O1 may be found in the temperate waters of the estuarine areas surrounding the United States of America. Nevertheless, despite few cases a year, the US population does not suffer from cholera epidemics thanks to proper sanitary conditions that prevent its significant development.

As ACF, our role is not to fully understand and work on the complex dynamics between the Vibrio and its host environment. However, it is important to integrate the cholera endemic aspect into region, country and mission strategies. Similarly in Risk Management programs, two steps need to be distinguished: the emergency response preparedness and the reduction of the likelihood of cholera epidemic through the implementation of resilience programs, including particularly WaSH and Food Security (approach “punch and shield”).
REFERENCES

ACF EPRP Website include in section Tools box/Wash a complete cholera tool box with a collection of useful guidelines, policies and capitalization’s documents for epidemiology, preparedness and response during cholera outbreaks. http://www.missions-acf.org/kitemergency/HTML_STATIC/homepageEN.html

World Health Organization, cholera:
http://www.who.int/topics/cholera/en/index.html

Vibrio Cholerae: prepared by the New Zealand Ministry of Health (2001)

US Food and Drug Administration: Vibrio cholerae O1:
http://www.fda.gov/Food/FoodSafety/FoodborneIllness/FoodborneIllnessFoodbornePathogensNaturalToxins/BadBugBook/ucm070071.htm

Les déterminants du choléra by Médecins du Monde:


Centre for Disease Control and Prevention
http://www.cdc.gov/cholera/
ACF - INTERNATIONAL

CANADA
7105 rue St-Hubert, Bureau 105
H2S 2N1 Montréal, QC, Canada
E-mail: info@actioncontrelafaim.ca
Tel: +1 514 279 4876
Fax: +1 514 279 5135
Web: www.actioncontrelafaim.ca

FRANCE
4 rue Niepce
75662 Paris, cedex 14, France
E-mail: info@actioncontrelafaim.org
Tel: +33 (0) 1 43 35 88 86
Fax: +3 (0) 1 43 35 86 00
Web: www.actioncontrelafaim.org

SPAIN
C/Caracas 6, 1
28010 Madrid, España
E-mail: ach@achesp.org
Tel: +34 91 391 53 00
Fax: +34 91 391 53 01
Web: www.accioncontraelhambre.org

UNITED STATES
247 West 37th, Suite #1201
New York, NY 10018 USA
E-mail: info@actionagainsthunger.org
Tel: +1 212 967 7800
Fax: +1 212 967 5480
Web: www.actionagainsthunger.org

UNITED KINGDOM
First Floor, rear premises,
161-163 Greenwich High Road
London, SE10 8JA, UK
E-mail: info@aahuk.org
Tel: +44 208 293 6190
Fax: +44 208 858 8372
Web: www.aahuk.org