Briefing Note – 25 August 2016

CENTRAL AFRICAN REPUBLIC

Cholera epidemic

	Not required	Low	Moderate	Significant	Major
Need for international assistance		X			

	Very low	Low	Moderate	Significant	Major
Expected impact		X			

Crisis overview

166 cholera cases and 19 deaths have been recorded in CAR as of 21 August. The government declared an outbreak on 10 August, although cholera was first detected on 27 July in Mourou-Fleuve village, Ndjoukou subprefecture of Kemo, located along the Oubangui River, 100km from the capital Bangui. The outbreak has since spread to Damara subprefecture (Ombella Mpoko) and to at least four arrondissements in Bangui.

Most of the affected are located along the Oubangui River, which serves as the borer with DRC. Road access to these communities is very limited due to the rainy season.

Location of reported cholera cases

Source of map: Vidiani

Anticipated scope and scale	Between end of July and 21 August, 166 cholera cases including 19 deaths had been reported in Ndjoukou, Damara, and Bangui. There is the risk that cholera spreads among IDP sites in Bangui, and to communities along the Oubangui River in DRC.
Priorities for humanitarian intervention	• Health: 166 cholera cases reported and 19 deaths as of 21 August. • WASH: Lack of access to drinking water among communities along the Oubangui River.
Humanitarian constraints	• Access by road to some communities along the Oubangui River is very limited due to the ongoing rainy season. Some areas are reportedly only accessible by boat. • The security situation is still volatile in Bangui.

Limitations

The number and location of cholera cases in Bangui are not available. The last available number of cholera cases is four days old.

There is a lack of information on health, food and wash needs among populations along the Oubangui River.

Crisis impact

As of 21 August, 166 cholera cases and 19 deaths had been recorded. The outbreak was first detected on 27 July in Mourou-Fleuve village, along the Oubangui River, in Ndjoukou subprefecture (Kemo prefecture), 100km from Bangui. On 10 August, the government declared a cholera outbreak. The outbreak has spread to Damara subprefecture (Ombella Mpoko) and to at least four arrondissements of Bangui (VoA 18/08/2016, OCHA 15/08/2016, Reuters 18/08/2016, UNICEF 12/08/2016).

It is mostly affecting hard-to-reach communities located along the Oubangui River, in Ndjoukou, near Democratic Republic of Congo's Sud and Nord Ubangui provinces (WHO, Government of Cameroon 17/08/2016; OCHA 22/08/2016).

This outbreak is likely to have been caused by the ongoing cholera epidemic in DRC (TRT 22/08/2016).

Health: As of 21 August, 166 cholera cases and 19 deaths have been reported in Ndjoukou subprefecture, Damara subprefecture, and Bangui (OCHA 22/08/2016). Health access is limited everywhere except in Bangui. Public health facilities lack medicine and equipment.

WASH: Poor access to access to safe drinking water along the Oubangui River has been reported. Some communities use untreated water from the river as their main source of water, increasing the risk of waterborne diseases such as cholera. Very limited access to improved latrines and to improved sanitation is reported in Bangui, Kemo and Ombella Mpoko prefectures. Only 7% of the population in Kemo prefecture has access to improved latrines and sanitation. (Reuters 18/08/2016, UNICEF 12/08/2016 Census)

Factors affecting efforts to control the outbreak

- Access by road to some communities in Ndjoukou is very difficult or impossible due to seasonal rains (May–October). These areas are reportedly only accessible by boat. (IOM 16/08/2016, UNICEF 12/08/2016)
- Lack of medical staff and lack of medicine have been reported in Ndjoukou (Journal de Bangui 19/08/2016)
- Humanitarian access is limited, particularly for people in enclaves such as PK-5 in Bangui and in affected communities outside the capital, due to armed groups' control of the roads. Armed groups still appear to control large parts of the country.

Vulnerable groups affected

At least seven cases of children affected by the cholera outbreak have been recorded along the Oubangui River. Young children are particularly vulnerable to cholera. Children suffering from malnutrition and affected by cholera have a higher mortality risk (UNICEF 12/08/2016).

Aggravating factors

Rainy season

The ongoing rainy season (May–October) poses a flooding risk, and increases the risk of contaminated water being consumed (WFP Seasonal Hazard Calendar 2011).

Heavy rains were reported end of July in Bangui, leading to hundreds affected, houses destructions and shelter needs, notably in the 6th arrondissement (Journal de Bangui 27/07/2016).

Stagnant waters resulting from seasonal rains were reported in Bangui end of August, increasing the risk of mosquito-borne diseases (RFI 23/08/2016). July–August is the peak malaria season (July–August) (MSF 25/04/2012).

IDPs in Bangui

As of June, up to 49,000 displaced people by conflict and armed clashes live in 26 sites in Bangui (IOM 16/08/2016). WASH needs have been reported in IDP sites in Bangui, which is likely to facilitate the spread of cholera if it reaches IDPs in these sites (UNHCR, Protection, CCM, Shelter Clusters 15/07/2016). (Reuters 18/08/2016)

Political stability and security

Violent incidents are still frequently reported in Bangui. On 28 July, a UN peacekeeper was killed by unidentified gunmen (OCHA 28/06/2016). Mid-June, an armed group abducted six police officers in PK5 neighbourhood: fighting between MINUSCA and the armed group resulted in seven deaths (UNHCR 22/06/2016) On 11 June, at least three people were reportedly killed in violence between Muslims and Christians (News Ghana 12/06/2016). An increase in violence could impact access, and cause displacement to overcrowded and unsanitary sites.

Contextual information on cholera

Cause and symptoms

Cholera is an acute intestinal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio cholerae.* It has a short incubation period, from less than one day to five days. Symptoms include copious, often painless, watery diarrhoea that can quickly lead to severe dehydration and death if not promptly treated. Vomiting also occurs in most patients. If left untreated, cholera can kill within hours (WHO, 29/07/2014).

Treatment

80% of cholera cases can be successfully treated with oral rehydration salts. Very severely dehydrated patients require intravenous fluids as well as appropriate antibiotics to diminish the duration of diarrhoea, reduce the volume of rehydration fluids needed, and shorten the duration of *V. cholerae* excretion (WHO 29/07/2014).

Previous outbreaks

The last cholera outbreak in CAR was in September–October 2011. The first cases were recorded in Sekia Mote, Bokelo, Mondoli, Monza, Bokassi, Nzinga, and Sedale villages in Lobaye subprefecture (Ombella Mpoko), close to Bangui, in September 2011. The government declared the epidemic officially on 30 September 2011, with 51 cases and 11 deaths reported. New cases of cholera continued to be registered until mid-October. The outbreak spread to six arrondissements in Bangui. In total, 172 cases were recorded and 16 deaths. End of October, several cases from neighbouring DRC were registered in Mongoumba and the surrounding localities, which are located along the Oubangui River in Lobaye subprefecture (Ombella Mpoko). (AFP 10/08/2016 Reuters 18/08/2016 ICRC 25/06/2012)

Risk factors

Cholera transmission is closely linked to inadequate environmental management. Typical at-risk areas include places where the minimum requirements of safe water and sanitation are not met. Where cholera bacteria are present or introduced, the disruption of water and sanitation systems, or the displacement of populations to inadequate camps, can increase the risk of transmission. The re-emergence of cholera has recently been identified in parallel with the increasing size of vulnerable populations living in unsanitary conditions (WHO 29/07/2014).

Vaccines

Although effective control measures rely on prevention, preparedness, and response (WHO 02/2014), oral cholera vaccines of demonstrated safety and effectiveness have recently become available. Their use in emergency situations, although accepted, still remains a challenge and must be complementary to existing strategies for cholera control. Some countries have already used oral cholera vaccines to immunise populations considered at high risk for cholera outbreaks. Work is ongoing to investigate the role of mass vaccination as a public health strategy for protecting at-risk populations against cholera (WHO 29/07/2014).

Response capacity

National and International response capacity

The CAR Government declared a cholera outbreak on 10 August. WHO and UNICEF are reportedly working with the government on response. Médecins Sans Frontières is responding in Bangui and is monitoring communities along the Oubangui River. The International Organisation for Migration (IOM) is also active. CAR Red Cross is responding (Contagion Live 17/08/2016 OCHA UN RHCAR 12/08/2016 Reuters 18/08/2016 WHO 11/08/2016 Journal de Bangui 18/08/2016).

Population coping mechanisms

Lack of hygiene practise and open defecation have been reported in affected areas. Due to lack of access to health healthcare, communities affected by cholera outbreak in Djoukou subprefecture are resorting to traditional remedies (Journal de Bangui 19/08/2016).

Information gaps and needs

- Lack of information on Health and WASH needs along the Oubangui River.
- Number and location of cholera cases in Bangui are not accessible.
- The last available number of cholera cases is four days old.

Lessons learned

- Plotting clusters of cholera cases on a map helps health workers better target WASH activities. GPS facilitates follow-up visits to identify high-risk practices that accelerate the spread of cholera. The combined use of mapping and GPS yields better results (IRIN 31/12/2012).
- The WASH response and especially the protection of water sources from contamination must be optimised in the early stages of the epidemic. Primary prevention is centered around promoting access to safe water at home, better hygiene practices to avoid secondary transmission, and clean sanitation facilities (UNICEF, August 2011). With training, adequate supplies and treatment facilities, hospitalised case fatality rates of <1% can be reached.
- Secondary transmission is decreased through disinfection, decontamination, appropriate measures of isolation, quarantine and prevention of nosocomial transmission (UNICEF 08/2011).
- Level of community surveillance and detection at entry point of epidemic resumptions with sentinel and early-warning systems remains key. Also important is cross-sectoral steering of a tailored response, based on the analysis of cholera transmission context dynamics to reduce the spread of the epidemic (population gatherings, drinking water, within socio-professional groups, households and CTC, funerals) (UNICEF 28/07/2014).
- When interventions have not been coordinated or where a multi-sectoral approach has not been used, the occurrence and recurrence of outbreaks cannot be prevented. Cholera preparedness plans include engagement with stakeholders, understanding the in-country cholera sources, putting contingency stock into place, raising awareness, ensuring safe water supply, ensuring safe excreta disposal, active case monitoring, and conducting cholera awareness activities in communal places (Oxfam 06/2012).

Key characteristics in Bangui, Kemo and Ombella-Mpoko

Key indicators	Bangui	Kemo prefecture	Ombella-Mpoko
Total population	622,771 (2003)	118,420 (2003) (Ndjoukou 29,240)	356,725 (2003) (Damara 6,196)
Urbanisation	-	70.6%	56.6%
Gender and age distribution of population	315,006 male 307,765 female	58,520 male 59,900 female	178,536 male 178,189 female
IDPs in host communities	53,857	2,784	16,011
IDPs in displacement sites	11,139	132	39,206
Prefecture capital	Bangui	Sibut	Boali
Lighting and cooking	Population with access to electricity across CAR: 10.8% Population using wood for cooking across CAR: 96.9%		
WASH	Adequate sanitation: 43.1% Improved latrines: 36.7% Open defecation: 19.4% Access to drinking water: 78.2%	Adequate sanitation: 7.1% Improved latrines: 7% Open defecation: 21.9% Access to drinking water: 49.8%	Adequate sanitation: 17.2% Improved latrines: 15.9% Open defecation: 15.5% Access to drinking water: 41.3%
Health	National under-five mortality: 130 deaths/1,000 live births (2015)		
Food security	5 out of 8 arrondissements Stressed (IPC Phase 2) the rest of Bangui in IPC Phase 1 (Projection for March 2016)	Most in Stressed (IPC Phase 2) (Projection for March 2016)	Most in Stressed (IPC Phase 2) (Projection for March 2016)
Nutrition levels	GAM: 12.3% (2006) SAM: 2.8% (2006) Stunting prevalence across CAR: 40.7%	GAM: 11.3% (2006) SAM: 2.5% (2006)	GAM: 13.7% (2006) SAM: 4.8%
Literacy	76.6%	33.4%	46.9%

Sources: CityPopulation; GeoHive; Census CAR 2013; UNICEF; OCHA 2006; IFSPC 17/08/2016, World Bank)