

NIGER

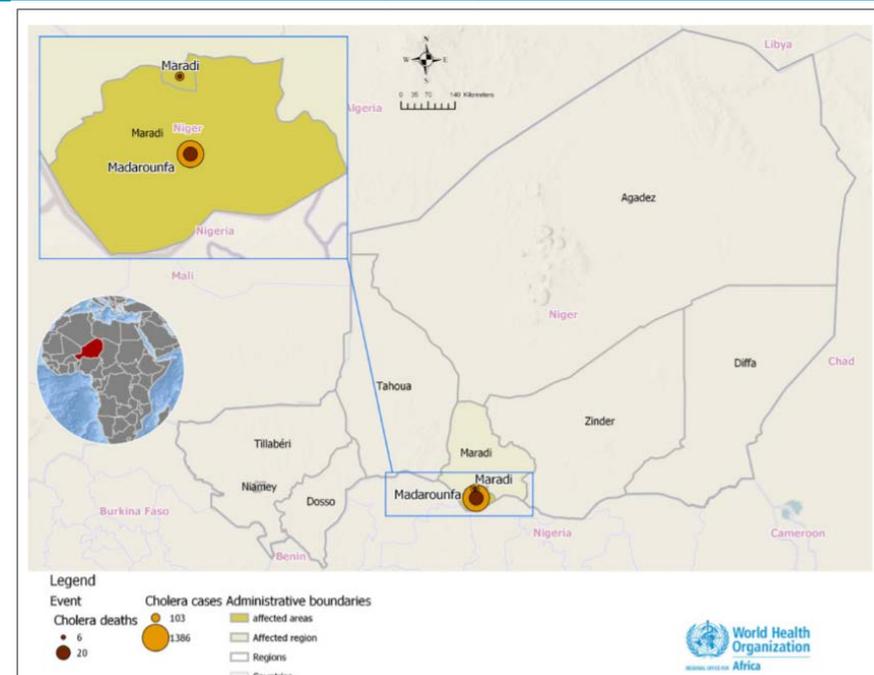
Cholera Epidemic in Maradi region

1,489 cholera cases (including 26 deaths) have been reported in Maradi region since 15 July. After showing signs of improvement in early August, the outbreak intensified after 10 August. More than 930 cases, including at least 19 deaths, have been reported since 11 August. The outbreak was initially contained in Madarounfa department but has now spread to the heavily populated city of Maradi, the capital of Maradi region. Heavy rainfall and floods in the area have affected more than 20,000 people and are exacerbating the risk of contamination.

NEED FOR INTERNATIONAL ASSISTANCE



IMPACT



Anticipated scope and scale

As of 15 August, 1,489 cases and 26 deaths have been reported in Maradi region but **the caseload is likely to increase**. In Madarounfa department, 90,000 people live in affected areas and the city of Maradi, home to more than 300,000 people, is also affected. High population density is propitious to contamination.

The outbreak is also likely to spread to other areas inside the region and even outside, due to **poor health and WASH infrastructure**, ongoing floods, and limited awareness of the contamination process among the population.

Key priorities



+1,489
cases of cholera



Poor WASH facilities
enabling the spread of cholera



+20,000
people affected by floods

Humanitarian constraints



The road network is in bad condition and has been impacted by the recent floods. The affected population is stretched over various health areas and floods have caused displacements.

Limitations

Very limited data is available on the state of the WASH and health infrastructure. Existing data is outdated.

Crisis impact

Health: An outbreak of cholera was declared in Maradi region on 15 July 2018 after the Centre for Medical and Health Research confirmed that three collected samples had tested positive. Although the outbreak was initially contained in the department of Madarounfa, it has now spread to the city of Maradi, the third-largest city in Niger and the administrative centre of Maradi region. As of 15 August, cases have been detected in 14 health areas in Madarounfa and four in Maradi city. (WHO 20/08/2018, WHO 14/08/2018)

At least 1,489 cases, including 26 deaths (CFR 1.8%) have been reported since the beginning of the outbreak. Most cases (1,386, including 20 deaths) were reported in Madarounfa department while 103 (including six deaths) were reported in Maradi city. (WHO 20/08/2018) After showing signs of improvement in the first few days of August, the outbreak intensified after 10 August. More than 930 cases, including at least 19 deaths, have been reported since 11 August. (WHO 20/08/2018)

The caseload is likely to increase. WHO classifies Madarounfa as a high-risk area for the spread of cholera because of poor hygiene and sanitary conditions. (WHO 24/07/2018) The Regional Directorate of Public Health in the region of Maradi says more than 90,000 people live in the affected areas and at least 21,000 are considered at high risk of contamination. Those figures are probably higher as of today, because at the time they were reported, the outbreak had not yet affected Maradi city. (IFRC 13/08/2018)

Source: WHO 20/08/2018

Humanitarian and operational constraints

Week	14-20/07	21-27/07	28-03/08	04-10/08	11-17/08
No. cases	123	314	739	993	1,489
No. deaths	4	4	11	15	26
CFR	3.25%	1.27%	1.49%	1.51%	1.75%

Despite the lack of information from the field, the floods have probably damaged the roads. Population displacement due to flooding also increases the risk of the outbreak spreading outside the region and complicates the access of aid to the affected populations. (RFI 10/08/2018)

Funding and humanitarian attention have long been focused on the Diffa region, where intercommunal conflict and the presence of Boko Haram have led to large-scale displacement within the region and from Nigeria. The lack of funding could affect the response capacity. Donor fatigue is also impacting the improvement of WASH infrastructure that is needed to eradicate cholera. (IFRC 13/08/2018)

Aggravating factors

Rainy season

Landslides and floods are relatively common during the rainy season. These can increase the risk of water contamination and disease transmission, and reduce access to health and WASH facilities for populations in need. Stagnant water also increases the risk of mosquito-borne diseases. Malaria should especially be watched as it is prevalent in the southern half of the country, including in Maradi. (WHO accessed on 22/08/2018, WHO 2017)

Floods and heavy rains have impacted the Maradi region since July. More than 20,000 people have been affected in Maradi region, including farmers and herders who lost crops and cattle. Most households in Maradi region are in a Minimal phase of food insecurity (IPC 1). However, according to the latest estimates, 25,944 heads of cattle died and more than 6,500 hectares of crops were damaged by floods across the country. Though there is no disaggregated data by region, Maradi was the most affected. This could lead to increased food insecurity in the area. (OCHA 17/08/2018, FEWSNET 30/06/2018)

Cholera epidemic in Nigeria

The three first declared cases were treated in N'Yelwa Health Centre. They were all members of the same family living in Makada village, Katsina state, in neighbouring Nigeria, where a cholera outbreak began in early 2018. The neighbouring states of Katsina and Zamfara, in Nigeria, are among the most affected, with 82 new cases (including five deaths) in Katsina and 176 new cases (including three deaths) in Zamfara reported between 30 July and 5 August. (WHO 20/08/2018)

There is significant cross-border movement between Niger and Nigeria. This high level of mobility between the two countries facilitates the transmission of diseases. The axis between Maradi, Zinder and Diffa is considered to be one of the main points of entry for cholera in Niger. (UNICEF 08/2014)

Malnutrition

Source: INS 11/2016

Maradi region	GAM	MAM	SAM
Rural areas	13.3%	11.2%	2.2%
Urban areas	7.6%	6.7%	0.8%

Malnutrition is an aggravating factor in the context of a cholera outbreak. According to the last SMART survey, based on data from 2016, around 56% of the population suffer from chronic malnutrition in rural areas of Maradi region, while the rate in urban areas stands at 39%. (INS 11/2016)

GAM rates remain under the emergency threshold set at 15% by WHO, but they exceed the critical threshold of 10% in rural areas.

Contextual information

Cause and symptoms

Cholera is a waterborne disease causing an acute diarrhoeal infection. Most people infected only develop mild symptoms. The disease is highly contagious and, if untreated, it can kill within hours after the first symptoms. Cholera outbreaks are usually caused by disrupted drinking water systems, lack of chlorination, and population movements. (WHO 01/02/2018)

Treatment

Cholera can easily be treated through oral rehydration solutions. In the event of severe dehydration, intravenous fluids or antibiotics can diminish the duration of diarrhoea, increase rehydration, and help kill the bacteria. When treated properly, cholera is fatal in only 1% of the cases. (WHO 01/02/2018)

Three types of WHO-approved oral cholera vaccines have been frequently used during outbreaks. (WHO 01/02/2018)

Awareness-raising campaigns, the promotion of appropriate hygiene practices (hand washing, safe storage and preparation of food, safe disposal of children's faeces), and safe burial practices can reduce the risk of cholera outbreaks. Health education campaigns, adapted to local culture and beliefs, should promote the adoption of appropriate hygiene practices. (WHO 01/02/2018)

Previous outbreaks

Various cholera outbreaks have occurred in southern Niger in recent years, the latest one in 2014. Between September and December 2014, 2,059 cases were reported. The outbreak first impacted Tahoua region before spreading to other areas in Maradi and Madarounfa, and ultimately to Diffa, where the Nigerian refugee population was the most affected (around 95% of the reported cases). (UNICEF 27/03/2018, IFRC 30/12/2014, MSF

24/10/2014) Other outbreaks also took place in 2013 (599 cases) and 2012 (5,285 cases). (OCHA 16/08/2018)

Vaccines, control and prevention

Although effective control measures rely on prevention, preparedness, and response, cholera vaccines of demonstrated safety and effectiveness are available. This vaccine is well tolerated and confers high-level (85%–90%) protection for six months after the second immunization in all vaccinees over age two. Booster doses are recommended after two years for adults and children aged six years or more, and every six months for children aged 2–5 years. Three WHO pre-qualified oral cholera vaccines are reported to be safe and efficacious, providing 66%–67% protection for at least two years. However, all three vaccines require two doses for full protection, which leads to implementation complication in cases where the population is subject to displacement due to conflict or natural events. (WHO 2018)

No vaccination campaigns have been carried out in Niger in recent years, leaving the population at greater risk of contracting waterborne diseases. (UNICEF 17/08/2018) On 14 August, an ad-hoc committee formed by WHO, UNICEF, MSF and the Red Cross met to develop a request to the International Coordinating Group (ICG) on cholera vaccine provision. (WHO 20/08/2018) The ICG manages the global stockpile of oral cholera vaccine and evaluated the request within 48 hours.

Vulnerable groups

Children are at a greater risk of infection by cholera especially when left unattended, as they are more likely to drink from unclean sources of water, eat food that hasn't been washed and prepared properly, or play in places that have been contaminated. Children are also at a greater risk of dying when contaminated. Diarrhoea from cholera can cause extreme dehydration that will more severely impact children than adults, as their immune systems are not fully developed. Malnourished children are especially at risk.

In Maradi region, children under five years of age constitute 23% (337 cases) of the total caseload. (WHO 20/08/2018)

Affected areas	Total population	No. Cases	No. Deaths
Maradi city	326,804	103	6
Madarounfa dep.	548,889	1,386	20
Total (Maradi region)	4,160,231	1,489	26

Key characteristics

Source: INS 2017

Health statistics. The WHO recommends that there should be at least one doctor for 10,000 people and one nurse for 5,000 people. According to data from the National Institute of Statistics, there is one doctor for 83,437 people in Madarounfa department, and one nurse for 8,783 people. In Maradi city, there is one doctor for every 24,839 people and one nurse for 2,014 people. (INS 2017)

The latest data published by the Ministry of Health shows that there is one regional hospital in Maradi city and one district hospital in Madarounfa department. A new reference hospital should soon be operation in Maradi city. There are also 22 health centres in Madarounfa department and 10 in Maradi city. According to the same source, only 51% of the population in Madarounfa department have access to the minimum package of health activities (PMA) (INS 06/2017)

WASH statistics: Some 37% of the population in Maradi region has access to basic sources of potable water. There is no information about the quality and improvement of those water sources. (WHO UNICEF accessed on 22/08/2018)

There is very little information regarding WASH infrastructure at regional level. However, it is estimated that 75% of the population in Maradi region defecate in the open and only 10% have access to basic sanitation. (WHO UNICEF accessed on 22/08/2018)

Response capacity

Local and national response capacity

Communities are being sensitised through various channels of communication, including community radio and use of community liaisons and local leaders to disseminate cholera information. (WHO 20/08/2018)

Free health services are provided in local health centres in the towns of Nyelwa, Dan Issa and Maradi, supported by Doctors Without Borders (MSF). (ANP 24/07/2018)

International response capacity

WHO Country Office is providing technical support for the coordination of the response and deployed an epidemiologist to Maradi region to support local response teams. (WHO 07/08/2018)

MSF has installed hand washing and disinfection facilities at the health centre level, while UNICEF supported chlorination of water at source and at household level. (WHO 20/08/2018)

UNICEF also aired health and hygiene messages through community radio; distributed 100,000 bars of soap and water purification tablets in affected villages for 10,000 households; disinfected households; and promoted good hygiene practices in communities. (UNICEF 17/08/2018)

Information gaps and needs

There no information on how the floods have impacted the WASH and health infrastructures in Maradi region and very little is known about the current capacities of the local health and WASH infrastructures. Most reports from the Ministry of Health and the Ministry of Hydraulics and Sanitation are based on data from 2013-2016.

Lessons learned

Historically, the regions that are most vulnerable to cholera outbreaks in Niger are found around the Lake Chad (Diffa), along the border with Nigeria (Maradi, Tahoua, and Dosso) and along the River Niger (Tillabery and Niamey). The epidemic has not yet spread outside the borders of Maradi region. However, displacements induced by the floods, as well as the floods themselves, could enable the epidemic to spread. (OCHA 31/07/2018, Cholera Platform 10/2016)

Early detection, quick and multisectoral response are key not only to contain a cholera outbreak, but also to prevent its reoccurrence. (WHO 01/02/2018) Past experiences in Niger have shown that the epidemic is likely to last several months before the dry season allows it to recede.

The major risk factor for outbreaks associated with flooding is the contamination of drinking-water facilities. However, the risk can be minimised if rapidly addressed. The provision of clean drinking water should be a priority. WASH infrastructures must be improved to eradicate cholera in the long term. (WHO 07/08/2018, WHO accessed on 22/08/2018)

Some people in Niger have been reluctant to drink water treated with chlorine because of the unnatural taste, and may choose to drink untreated water instead. It is therefore crucial to engage communities for cholera prevention, and to raise awareness among community leaders and political authorities. (WHO 07/08/2018, IFRC 13/08/2018)

Map: Areas affected by the cholera epidemic



Source: OCHA 15/08/2018