CAMEROON
Cholera in Far North

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Briefing note – 19 August 2019

Since 1 July, 123 suspected cholera cases have been reported in Cameroon's Far North region, including seven deaths. Kaélé, Kar-Hay and Moutourwa health districts (HD) of the Mayo Kani division in Far North are affected, with the majority (93) of cases reported from Kaélé HD (MoH Sitrep 10, 17/08/2019). Far North and neighbouring North region are highly susceptible to cholera, owing to poor hygiene practices, limited access to drinking water, and high population movement linked to the Boko Haram insurgency in the Lake Chad basin (MISANTE 08/2018).

Affected areas in Mayo Kani division

	Kaélé health department	Kar Hay health department	Moutourwa health department	Total figures
Resident pop.	51,150	25,680	16,750	93,580
No. of suspected cases	93	24	6	93
No. deaths (CFR)	6	1	0	7 (7.5%)

Sources: MoH Sitrep 10, 17/08/2019

Anticipated scope and scale

The current **rainy season** increases the risk of **further spread of cholera**. A spread to Logone-et-Chari and Mayo-Tsanaga divisions would be particularly alarming given the presence of displaced people living in congested spaces, with already high humanitarian needs and limited humanitarian access.

A **volatile security situation** in Far North region and **porous borders** with neighbouring Chad and Nigeria means cholera could easily spread across borders and might require a **regional contingency and response plan**.

Key priorities

WASH
hygiene promotion and access to water

Health assistance
for prevention and treatment

Humanitarian constraints

Heavy seasonal rainfall has led to a deterioration of road conditions, further impeding humanitarian access to the affected area. Insecurity in the region due to Boko Haram constrains access.

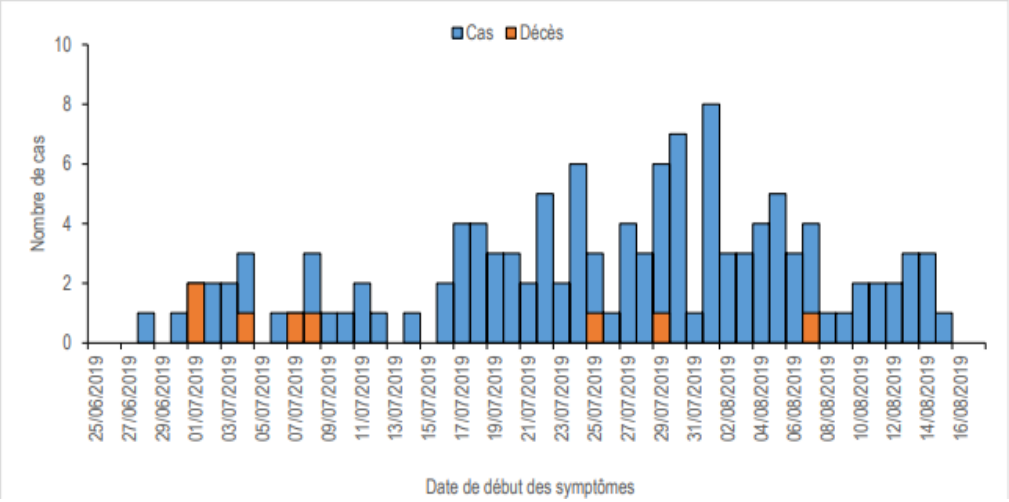
Limitations
Limited information available on existing needs in the affected area.

Any questions? Please contact our analysis team leader, Benedetta Cordaro: bc@acaps.org

Crisis impact

Since 1 July, 123 suspected cholera cases have been reported from Cameroon's Far North region. Kaélé, Kar-Hay and Moutourwa health districts (HD) of the Mayo Kani division in Far North are affected; most of these (93) are reported from Kaélé HD (MoH Sitrep 10, 17/08/2019). The first cases were reported from Midjivin health zone in Kaélé HD after patients had attended a funeral (MoH Sitrep 1, 15/07/2019). Kaélé is the only health department with new suspected cholera cases since 8 August (MOH Sitrep 9, 14/08/2019). The case fatality rate (CFR) for this outbreak currently stands at 5.7%, which represents an improvement from 7.5% in early August (MoH Sitrep 9, 14/08/2019; MoH Sitrep 7, 05/08/2019).

Reported suspected cholera cases and deaths



Source: MoH 18/08/2019

Far North as well as neighbouring North region are highly susceptible to cholera owing to poor hygiene practices, limited access to drinking water, and high population movement linked to the Boko Haram insurgency in the Lake Chad basin (MISANTE 08/2018). These factors, along with the rainy season continuing until October and proximity to the Chadian and Nigerian borders, risk a deterioration of the situation across the region. As of 14 August, at least 615 suspected cholera cases have been reported from Adamawa State (4 deaths, CFR of 0.65%) and 176 suspected cases from Borno State in Nigeria (MoH Adamawa 14/08/2019; IDSR Borno 11/08/2019; Cholera Platform CWA 16/08/2019).

WASH: Limited access to potable water and poor hygiene practices have been documented in Far North region (IJERPH 20/04/2017; MoH Sitrep 7, 05/08/2019; IPS 19/08/2014). The current rainy season is likely lead to overflowing of latrines and contaminate water sources, especially in areas where open defecation is practiced. Open defecation is more common in rural areas and among nomadic (pastoralists) camps (19%) (IJERPH 20/04/2017).

Far North region hosts more than 262,000 IDPs (UNHCR 06/2019). While 39% of these are staying with host communities, adding a strain to existing infrastructure, another 24% are staying in "spontaneous" shelters that are favourable to the spreading of diseases (DTM 08/04/2019). However, Mayo-Kani division only hosts a fraction (110) of these (OCHA 07/2019).

Health: There is a lack of qualified medical staff across health facilities in the affected area (IMC 12/2017). There are only 0.4 nurses per 1,000 inhabitants in the Far North (IJEH 12/05/2015). Access to health services is further constrained by limited financial resources and geographical distance of the affected population to health facilities as well as traditional barriers and health practices in the communities (IMC 12/2017).

Humanitarian and operational constraints

Humanitarian access is constrained by a poor road infrastructure with increasingly difficult conditions due to the rainy season (MoH Sitrep 7, 05/08/2019; UNICEF 06/2019). Disruptions to communication networks, although unclear if weather related, may pose additional challenges for coordination and reporting.

In addition, the volatile security situation in the Far North region linked to Boko Haram violence in the Lake Chad Basin is likely to hamper humanitarian access. Since 2017, Cameroon is considered landmine affected (Logistics Cluster June 2019). Although Mayo Kani division is relatively stable, it is unclear how insecurity in other parts of Far North region may impact humanitarians active in Mayo Kani. In mid-June the government suspended humanitarian operations in Logone-et-Chari division, heavily affected by insecurity and violence, following a rise of armed attacks in the area in May (OCHA 05/08/2019). This may drive humanitarian needs and trigger population movement to areas perceived to be more favourable for the affected population.

Vulnerable groups affected

IDPs and refugees are particularly vulnerable to cholera given their often-precarious living conditions and congestion in settlements. There are more than 350,000 refugees and IDPs in the Far North region, but only a small share of these groups in the affected Mayo-Kani division. Should the disease spread to other divisions in the region, these population

groups will be at a higher risk of contracting the disease and preventative measures should be taken.

As **women and girls** are more likely to take on caregiving roles and care of sick people, they are more exposed to the disease.

The prevalence of malnutrition remains extremely high across the region affected by Boko Haram violence, which adds to the disproportional vulnerability of **children**, who are likely to face greater risk from outbreaks of infectious disease, including cholera (WHO 29/11/2018; Emergency Nutrition Network 11/06/2019).

Aggravating factors

Rainy season

The rainy season runs from June to October (FEWS NET 06/2019). Risk of flooding and landslides is high across the country, which can impede humanitarian access to affected populations as well as reduce access to health facilities. Overflowing of latrines and standing water bodies increases the risk of water contamination and disease transmission.

Malnutrition

The chronic food security and nutrition situation in Cameroon has been compounded by conflict in neighbouring countries and the influx of refugees over the past five years (Emergency Nutrition Network 11/06/2019). People who are malnourished are more likely to develop cholera infection, and cholera is more likely to flourish in places where malnutrition is common, such as refugee camps, impoverished countries, and areas devastated by famine, war or natural disasters (Science Direct 05/2011). According to a 2017 SMART survey, chronic malnutrition rates in the Far North were as high as 41.9%, well above the national average of 31.7% (SMART 09/2017).

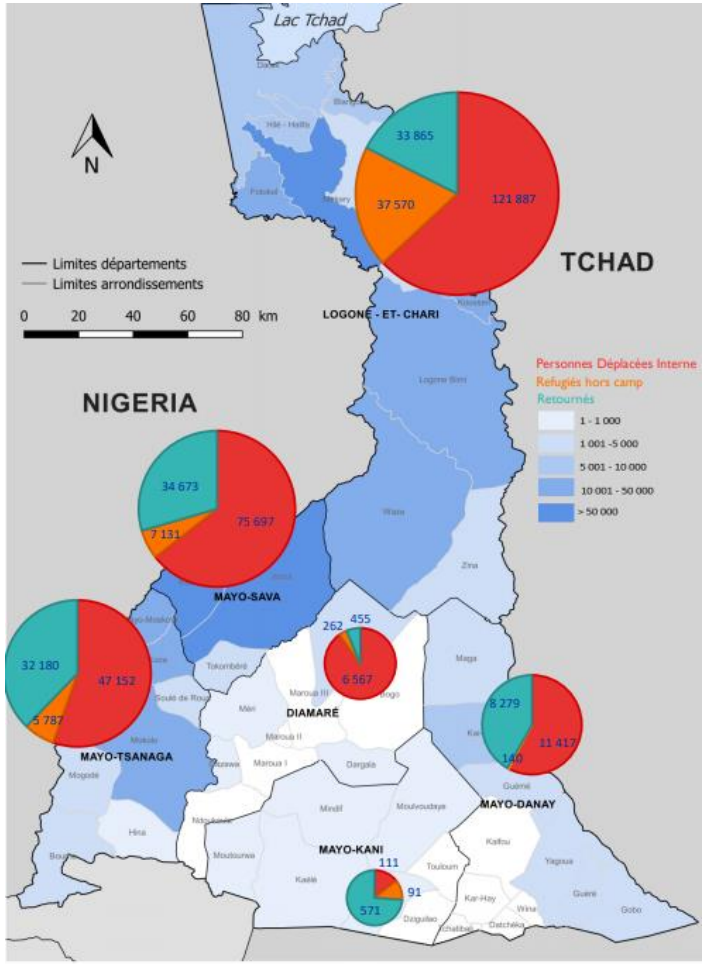
Chronic malnutrition in the Far North is linked, among other thigs, to limited nutritional diversity, and limited access to food (SMART 09/2017). Close to half of the 3 million acutely food insecure people in Cameroon can be found in the Far North (1.2 million moderately food insecure and 128,000 severely food insecure) (UNICEF 31/03/2019; OCHA 22/01/2019; OCHA 14/03/2019). There is currently no data on admin 2 or 3 publicly available.

Overall, local markets overall function at near normal levels. However, the volatile security situation has restricted food access and availability by limiting agricultural activity, increasing the cost of labour, looting of food stocks by armed groups and weakening trade, especially in the north-west and south-west parts of the Far North. Accordingly, poorer households and IDPs are expected to face Stressed (IPC-2) food security outcomes until January 2020 despite favourable climatic conditions for food production and recent harvests (beans, potatoes, maize) (FEWS NET 2019).

Population displacement and density

Population movement is a driver of diseases such a cholera, while settlements for displaced people are also susceptible to the spread of disease. (Science Direct 05/2011) (OCHA 22/08/2017). Although the vast majority of internal displacement is caused by conflict linked to Boko Haram, natural hazards and disasters including floods and abnormal dryness also lead to internal displacement (approx. 6% of all IDPs).

Location of IDPs, returnees and refugees in the Far North



Source: DTM 08/04/2019

Most IDPs, refugees and returnees in the Far North region can be found in Logone-et-Chari, Mayo-Sava, and Mayo-Tsanaga divisions, with displaced people making up only 1% of the total population of Mayo-Kani (DTM 08/04/2019). In Mayo-Kani, IDPs are primarily in the Moulvoudaye, Kaélé, and Mindif districts (IOM 2019). Return movements, although small-scale, of Nigerian refugees from Mayo-Kani have been observed, increasing the risk of spreading the disease to other divisions of Cameroon, and to Nigeria (DTM 08/04/2019).

Boko Haram insurgency

The Boko Haram (BH) insurgency in Nigeria expanded into Cameroon's Far North region in May 2014. Although the level of violence is generally lower today than in 2014-15, the number of BH attacks has increased since the end of 2018 in Chad, Nigeria, Niger and Cameroon. The group continues to act as an important driver of forced displacement and humanitarian needs across the greater Lake Chad region. Violence and insecurity linked to BH and counter-insurgency operations have caused internal and cross-border displacement, deteriorated socio-economic conditions, and led to widespread destruction of houses, infrastructure, roads, markets, health, and education facilities. The volatile security situation has restricted food access and availability by limiting agricultural activity, decreasing livelihood options, and weakening trade. 1.9 million people, almost half of the population of the region, need assistance in the Far North, where 74% of its population was already living below the poverty line prior to the BH incursion in 2014 (HRP 2019).

In the Far North region, Boko Haram violence is concentrated in Logone-et-Chari, Mayo-Tsanaga, Mayo-Sava and the Lake Chad area (UNHCR 06/2019). Attacks in the neighbouring Diamaré division have led to growing internal displacement rates since February 2019 (IOM 2019; ACLED 2019).

In mid-June, the government ordered the suspension of humanitarian aid to Logone-et-Chari following a rise of armed attacks in the area in May. This could have a destabilising effect on the region, with rising humanitarian needs of the affected population (OCHA 05/08/2019).

Contextual information

Cause and symptoms

Cholera is a bacterial 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 aggravated by disrupted drinking water systems, lack of chlorination, and population movements, all factors that drive the current situation in the Far North region (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).

Vaccines, control and prevention

Currently there are three WHO pre-qualified oral cholera vaccines (OCV): Dukoral®, Shanchol™, and Euvichol-Plus®. All three vaccines require two doses for full protection. An August 2017 WHO Position Paper on Vaccines against Cholera states that:

- OCV should be used in areas with endemic cholera, in humanitarian crises with high risk of cholera, and during cholera outbreaks; always in conjunction with other cholera prevention and control strategies;
- Vaccination should not disrupt the provision of other high priority health interventions to control or prevent cholera outbreaks (WHO 17/01/2019).

Prevention

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

Cameroon, Nigeria and Niger were exposed to one of the largest cholera outbreaks in recent years in October 2018 with more than 38,000 cases and 845 deaths reported at the regional level (OCHA 22/10/2018). The Cameroonian Ministry for Public Health declared the cholera epidemic on 14 July 2018, with most cases found in North (636 suspected cases), Far North (279 suspected cases), and Centre (72 suspected cases) regions (Government of Cameroon 02/01/2019). The last cases were reported on 5 December and the case fatality rate for Far North region (6.1%) was above the national average (5.8%).

The Far North, North and Adamaoua regions are most vulnerable to cholera outbreaks given poor hygiene practices, limited access to potable water, and high population movement (MISANTE 08/2018). The government's emergency response plan, with support from CDC among others, identified a limited human, financial and material resources as well as border surveillance and regional coordination as major challenges for the cholera response.

Key characteristics

Demographic profile:

Total population (2018): 24,678,000 people (UN Data as of 07/08/2019).

Population density: 52.2 per km^2 (UN Data as of 07/08/2019).

Sex ratio: 100.2 male per 100 female (UN Data as of 07/08/2019).

Food security figures. IDPs and host communities are currently experiencing food insecurity in the Far North region (IPC phase 2) (FEWS NET 2019). Stressed (IPC phase 2) food security is expected for vulnerable families (Far North region) through January 2020 (USAID 2019)

Health statistics: Infant mortality rate 52.8/1,000; under-5 mortality rate 79.7/1,000; maternal mortality ratio 596/100,000 (country level) (UNDP 2018)

Literacy levels. 76% illiteracy rates (Far North region) (World Bank 2017)

Response capacity

Local and national response capacity

The coordination of the cholera response in the Far North region is conducted by the Regional Delegate of Public Health/le Délégué Régional de la Santé Publique (DRSP) (Ministry of Public Health 2019). Both regional committees for cholera control and the local committee in Kar Hay district have been activated (Ministry of Public Health 2019).

Kaélé, Moutourwa and Kar Hay health departments are conducting community surveillance activities to contain the disease; cross-border surveillance is in place for Kar Hay and Guidiguis along the border with Chad.

The government has launched a sensitisation and hygiene promotion campaign in national media outlets to help contain the disease (BBC 10/07/2019).

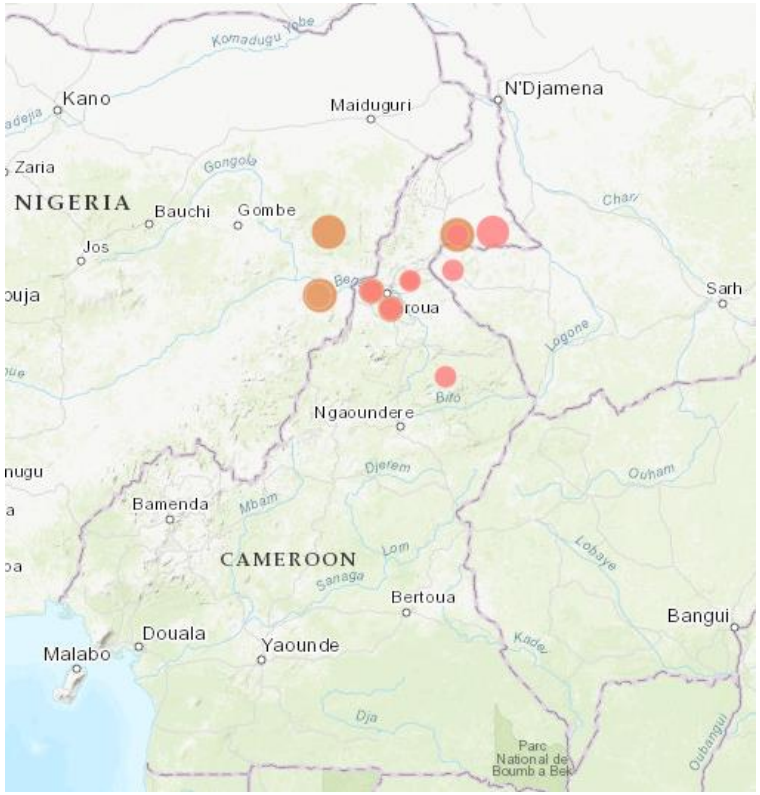
International response capacity

OCHA leads the inter-sectoral coordination in the Far North. 55 humanitarian actors, mostly international NGOs, have an operational presence in the Far North region (OCHA 06/2019). However, the number working in Mayo-Kani is much lower (11) given that humanitarian needs are concentrated in the departments of Logone-et-Chari, Mayo-Sava, and Mayo-Tsanaga. UNICEF – in partnership with the DRSP and l'Association des Animateurs Encadreurs en Développement Communautaire – is supporting the response to cholera in the Kaelé Health District. (MoH 2019).

Lessons learned

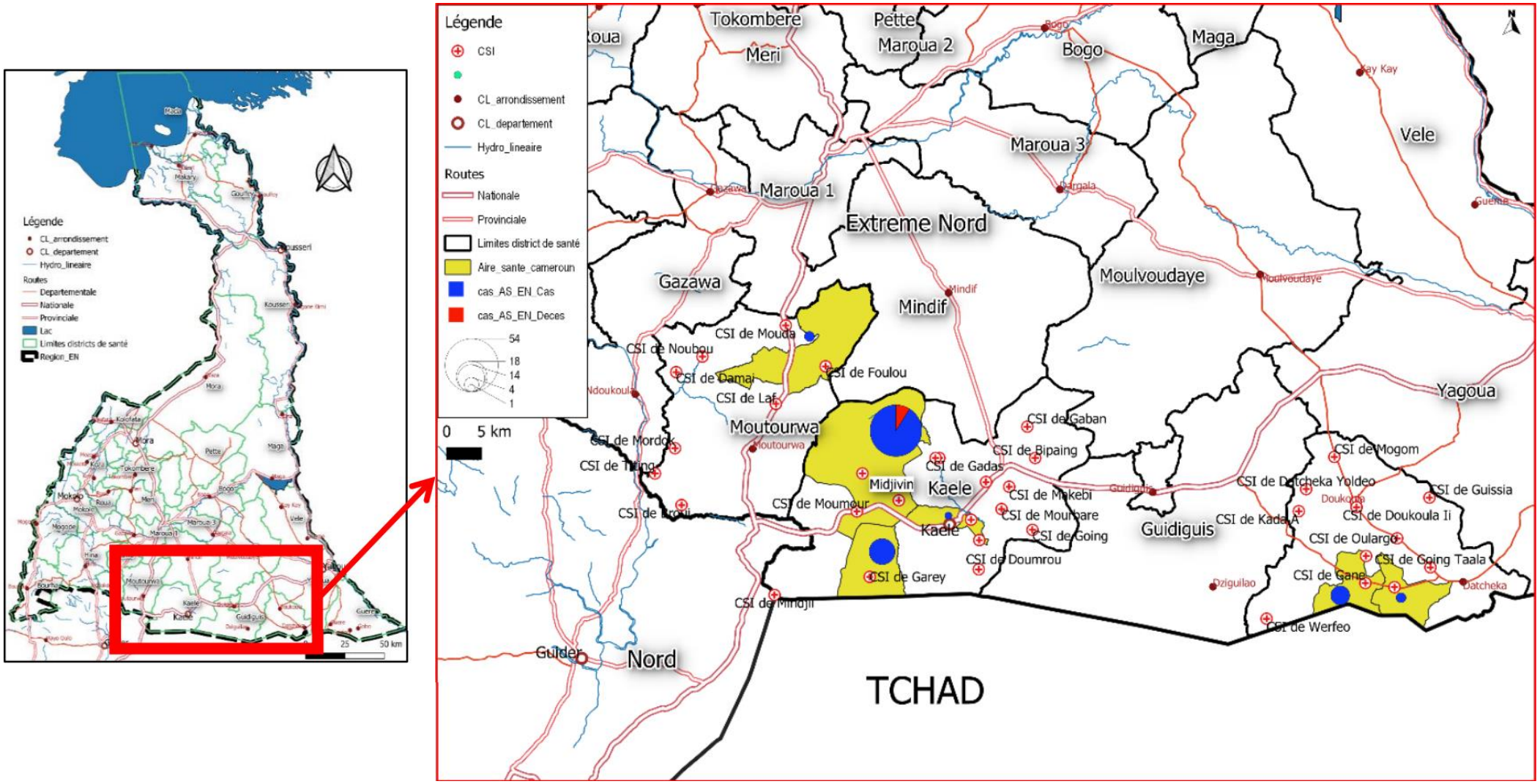
Early detection, quick and multi-sectoral response are key not only to contain cholera outbreaks, but also to prevent their reoccurrence (WHO 01/02/2018). It is crucial to engage communities for cholera prevention, and to raise awareness among community leaders and political authorities (Plateforme Cholera 08/12/2017). The improvement of WASH infrastructures is necessary to eradicate cholera. (WHO 01/02/2018)

Location of suspected Cholera cases in week 30 and 31



Source: Cholera Platform as of 19/08/2019

Map of the affected area in the Far North region



Source: MoH Sitrep 7, 05/08/2019