

Cross-border Meeting to strengthen cholera control
in Lake Chad Basin

Niamey, 8-9 April 2014



1. Background

- Situation of the cholera outbreak in the Lake Chad Basin area (Week 13, 2014)

As of 30th of March 2014 (**S13**), **12,531 cases** of cholera and 179 deaths (case fatality ratio: 1%) were reported in 14 States and 68 LGAs in **Nigeria**. On Week 13, the State of **Bauchi** reported **9,146 cases** of cholera, about 75% of all cases reported on a national level since the beginning of the year. 90% of all cases are reported in **urban areas**.

A **cholera** outbreak is currently reported in the Touboro district (cf. Figure 2), in **North Cameroon, at the border with Chad and CAR**. Between the 19th and the 28th of March 2014, 9 cases of cholera, including 4 deaths, were reported. Additional in-depth investigation are required to determine how the pathogen was introduced in the North region of Cameroon. Touboro **market** receives goods **originating** from Nigeria, namely from the State of **Bauchi**.

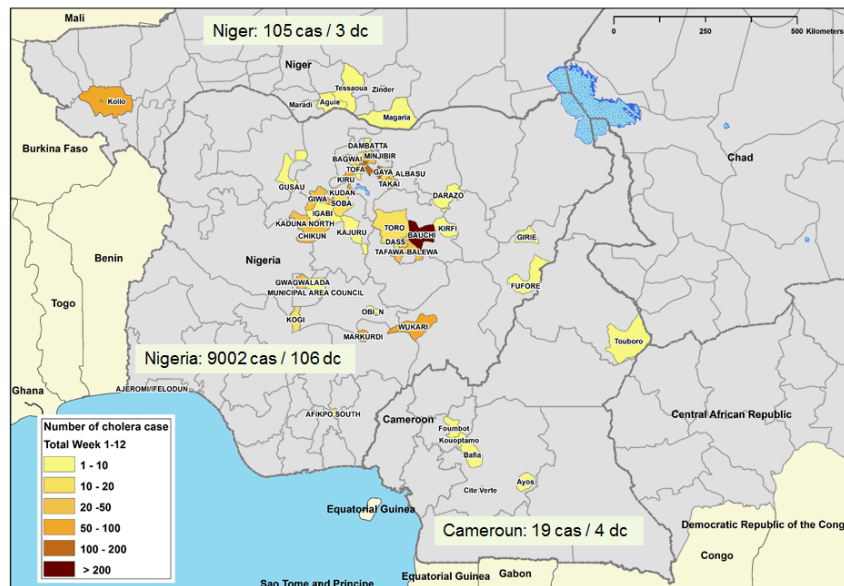


Figure 1: Mapping of the number of cases per district, Lake Chad Basin (W12, 2014)

Note that a set of conditions are met highlighting a possible move towards a **"complex" outbreak in the Lake Chad Basin area:**

- The **high number of cases in Northern Nigeria** at the end of the dry season, with already over 12,000 cases on Week 13. Spreading **potential from the affected urban centres** (Kano, Katsina, Bauchi, etc.) to other countries of the subregion via trade activities. Security issues in the **State of Borno** in Nigeria lead to a **partial epidemiological surveillance** in LGAs bordering Lake Chad and difficulties to intervene in the border health area on the Far North region of Cameroon.
- The area affected at the **CAMEROON-CHAD-CAR border** is a **high vulnerability** area due to the crisis in the Central African Republic (CAR). Proximity of "typical" cholera areas in Chad and Cameroon. Touboro is about 300km of Garoua in Cameroon and Pala in Chad. (cf. figure below).
- The **presence and mobility of displaced, refugees and return populations** in the 5 countries of the subregion due to the crisis affecting North-Eastern Nigeria and CAR
- The **decreased immunity** acquired by the population in contact with the pathogen, with the last major outbreak in the Lake Chad Basin between 2009 and 2011.

- High-risk cross-border areas

An integrated "Water, Hygiene, Sanitation and Epidemiology" study conducted in 2011 in the Lake Chad Basin area identified the **high-risk cross-border spreading areas** where vulnerability to cholera outbreaks is high (Figure 2) (Annex 1). The study highlights the importance to improve **cross-border surveillance, preparedness and collaboration** on a national level and at the periphery between Chad, Cameroon, Niger and Nigeria.

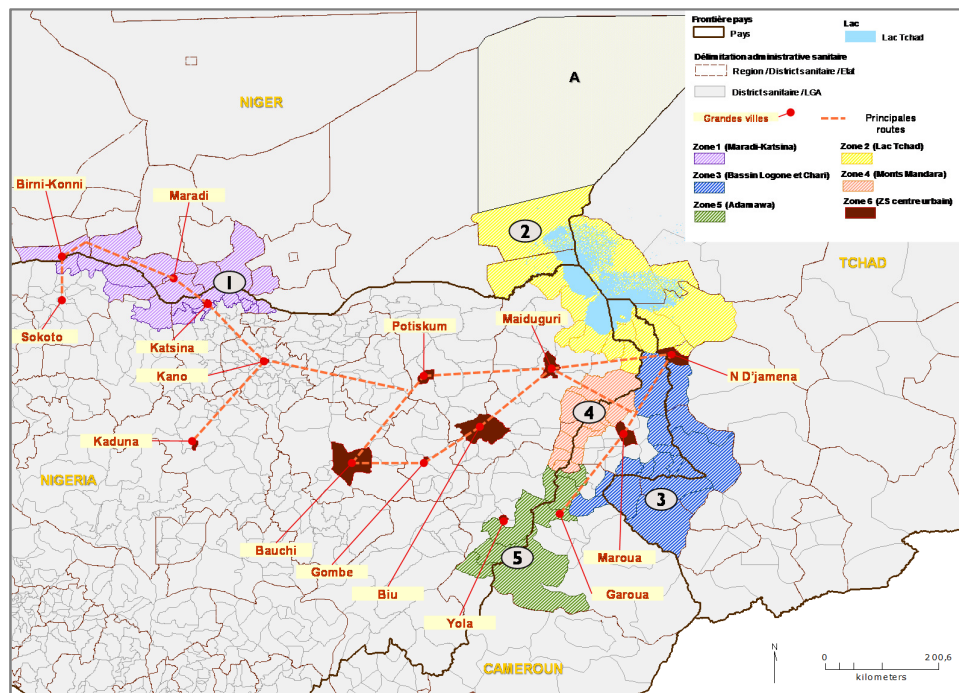


Figure 2: Priority areas for collaboration, preparedness and response to cholera outbreaks in the Chad Lake Basin area

Source: P.Y. Ogier, B. Sudre, Integrated « Wash & Epidemiology » study in lake Chad bassin, UNICEF – UFC, 2011

https://wca.humanitarianresponse.info/fr/system/files/documents/files/LakeChadBasinCholeraWasHStudy_fr.pdf

- Recommendations of Workshop and previous meetings

The object of the meeting was to implement recommendations of previous workshops and meeting, namely:

Abuja Commitments, October 2010

Health Ministers of Benin, Cameroon, Central African Republic, Chad, Equatorial Guinea, Niger and Nigeria commit to:

- Develop a joint initiative for a **multisectoral participation** for prevention and various public health issues in the Lake Chad Basin area
- **Designate contact persons** to establish a Monitoring Committee and follow up on the decisions and recommendations put forward in the cross-border meetings
- Promote **initiatives in the communities** focusing on disease prevention, early outbreak detection and water supply, sanitation and hygiene improvement.
- **Share information** on joint planification of questions related to cross-border public health, coordination and quick response to epidemics

Results of the Maroua Workshop, December 2011

Participants drew from their experience to:

- Suggest new direction for **cross-border epidemiological surveillance reinforcement**
- Better identify **areas and practices at risk** regarding cholera
- **Define Water, Sanitation and Hygiene activities** likely to reduce the number of cases of cholera

Recommendations of the Harmonization for Health in Africa Workshop, October 2013

Recommendations regarding cross-border partnerships:

- Develop a **regional multi-sectorial strategy to eliminate cholera** in Western and Central Africa by involving all actors in this common objective
- Encourage **bilateral and multilateral agreements** setting the **terms of the cross-border cooperation**
- **Accelerate the weekly sharing of epidemiological data** regarding cholera in the countries of the region and specifying cross-border alerts

2. Methodology

- Objectives
- **Ownership** of the **Shield and Sword** regional strategy by the MoH and partners: information on concepts developed on a regional level (sentinel site, integrated WASH-Epidemiology approach) and on the UNICEF Cholera Toolkit;
- **Information on oral cholera vaccine**: existence, priorities, role and access procedures;
- Discussions on **cross-border collaboration**: good practices, terms of cross-border alert, formalisation of exchanges, content of cross-border collaborations.

- **The Meeting**

The meeting took place over two days, on the 8th and the 9th of April, with plenary and group sessions (cf. Annex 2). The agenda included the following themes:

- Cholera situation and state of preparedness in the Lake Chad Basin border districts
- Shield and sword strategy for preparedness, prevention and response in cross-border areas
- Presentation of UNICEF Cholera Toolkit
- Vaccination strategy: characteristics and terms
- Community-based surveillance: sentinel sites and use of SMSs (RAMP)
- Terms of alert and cross-border collaboration
- Formalisation and operationalisation of cross-border collaboration

- **List of participants**

Thirty-two (32) participants from 4 countries, from the Ministry of Health, the Ministry of Hydraulic, from the UNICEF and WHO country offices, ECHO, IFRC, NRC, SI, ACF, CISP (Annex 3). Experts from the UNICEF West and Central Africa Regional Office, the WHO West Africa Regional Office and UNICEF Head Office New York.

3. Results

- Preparedness activities in high risk border districts

Cholera preparedness checklist

The 4 countries agreed on a **minimum list of activities** to be implemented as soon as possible in the high-risk **border districts** (Annex 4):

- **Risk assessment - last 5 outbreaks and current situation**
 - . List of at-risk districts
 - . List of at-risk health areas
 - . Seasonal fluctuations, duration, onset areas, hot spots and affected population
- **Early warning system**
 - . Sentinel sites in at-risk health areas: community-based surveillance, rapid diagnostic tests and items for case management and isolation
 - . Pre-positioning of rapid diagnostic tests, of sampling media
 - . A multidisciplinary investigation team is ready on a national and regional level
 - . Contacts between countries take place on a national, regional and district level
- **Epidemiological surveillance**
 - . Communication systems for data transmission are operational (health area, district and region)
 - . The national laboratory has consumables and technical capacities for cases confirmation
 - . Epidemiological data are regularly shared between the central levels of both countries
- **Response capacity**
 - . Pre-positioning of items for medical care, cases isolation and community response on a regional and district level
 - . Actors and response capacity mapping

It was decided that countries could add activities according to their needs. A **2-3 pages risk assessment document** (cf. box above) should be compiled in each country by the **surveillance officer** and **sent to cross-border focal points** for dissemination.

Preparedness activities monitoring instrument in border districts

The 4 countries agreed on a preparedness activities **monitoring tool** in border districts:

The **checklist** (Annex 4) is completed by the **epidemiological surveillance officers** in the 4 countries and **sent to the cross-border focal point** at the latest on the **25th April 2014** (IHR), (cf. Annex 5). **Dr Djaor Rebecca** (djaor@yahoo.fr) is in charge of **compiling checklists** before sending them to the focal points of all 4 countries (cf. Annex 5) at the latest on the **30th of April 2014**. The checklist is then updated on a **monthly basis** and sent back until completion of all preparedness activities.

Agencies focal points on a country and regional level are in charge of **monitoring and resolving constraints identified** (gaps) (cf. Annex 5).

- Prevention activities in high risk border districts

The participants of all 4 countries agreed on a **list of prevention activities** to be implemented as soon as possible in the high-risk border districts:

- Implementation of **local committees for outbreak control** in at-risk health areas
- Implementation of **community-based surveillance** in at-risk districts
- **Alert and regular information sharing** on cholera situation on a decentralized and **cross-border level**
- Increase **free chlorine level** in the water supply network
- **Bucket chlorination** at the filling points for water vendors and community wells
- **IEC and mass media** in at-risk villages
- **Soap and water disinfection products distribution** to households in high risk villages and areas

- Long term specific actions to improve and reinforce Health situation in at-risk districts (example ATPC/pit latrines for scaling up);

- **Information/discussion on oral cholera vaccine**

The session on oral cholera vaccine focused on the description of Shanchol, a vaccine recently pre-qualified by WHO and presenting more benefits than its older version, Dukoral. **Shanchol** doesn't **require buffer solution**, is only inappropriate for **very sick people, has a 65% effectiveness in 5 years**, and **costs 1.85 per dose** (excluding operational costs). The vaccine is available through the International Coordination Group (ICG) for **preemptive and reactive vaccination**, with the **same procedures as for meningitis and yellow fever**. For reactive vaccination, the outbreak needs to be confirmed by the lab, a water situation and sanitation analysis is necessary, as well as epidemiological data, and also to consider the population density as well as cholera response capacity locally. GAVI expressed interest in supporting OCV in the GAVI countries, but support mechanisms are still being discussed. Participants suggested **including oral cholera vaccine** in the **response plans** as an additional control tool.

http://www.who.int/cholera/vaccines/ocv_stockpile_2013/en/

- **Information/discussion on community-based surveillance**

IFRC presented the **community-based surveillance** system based on notification of suspected cases by SMS (RAMP). This system is created to **identify new cases** of diseases in the community **and refer them to health services**. The **SMS system** provides daily or weekly reports. Data can be entered in a local database or on the Internet. Can be used with any mobile phone, whatever the network. Instant electronic format conversion for entry in a database could accelerate emergency decision making.

CISP presented the sentinel sites system developed in Niger, the objective being to allow **early detection and response**.

Participants suggested **integration between sentinel sites and community-based surveillance with SMS system**. The importance of **integration** in the current **countries surveillance system (IDSR)** was mentioned as well as the necessity to **reduce vertical approaches on a community level**.

- **Cross-border collaboration**

During the meeting, participants defined the **content of cross-border collaboration** and discussed a **framework for information exchange and cross-border meeting**

Cross-border collaboration content

- **Cross-border alert** (sharing of information on suspected cases on a decentralised level)
- **Exchange of epidemiological data** (weekly notifiable diseases data sharing, weekly case linear lists sharing, etc.)
- **Information on population movements** (funeral rites, traditional ceremonies, migrations, etc.)
- **Information on actions taken** on each side of the border (market and school closure, etc.)
- **Information sharing** on surveillance (sentinel sites, SMS system) and response (PUR sachet innovations)
- Conduct **researches on the level of the Basin area** (ex: molecular biology)
- Sharing of reports from **debriefing workshops and lessons learned**

Cross-border exchange and meeting framework

Participants worked on a cross-border exchange framework on the basis of the diagram appearing below. The importance of **sharing with counterparts on each side of the border, as well as with the level directly above and all the structures supervised at the level directly below** (feedback) was highlighted.

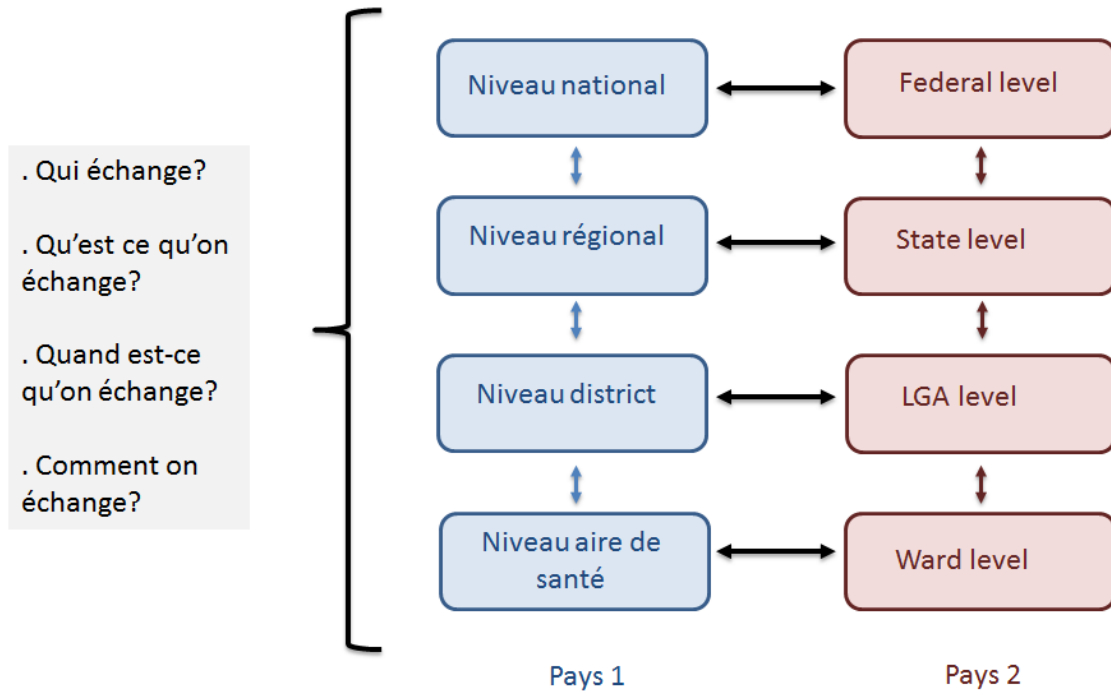


Table 1: Cross-border exchange framework for information sharing

| LEVEL | WHAT | WHEN | HOW | WHO |
|------------------------------|--|---|---|---|
| INFORMATION SHARING | | | | |
| LEVEL 4 CENTRAL LEVEL | <ul style="list-style-type: none"> . Agregated data . Line listing . Epidemic declaration . Response instructions . Innovations and good practices . Research . Innovations in terms of surveillance and counter-measure . Cross-border issues (free care, etc.) | <ul style="list-style-type: none"> . As soon as cases are confirmed . Every week for epidemic diseases (database, epidemiological bulletin, Power Point presentation) | <ul style="list-style-type: none"> . Public announcement (radio, TV, newspapers) . Email . Telephone | <ul style="list-style-type: none"> . Cross-border focal points (1) . Epidemiological surveillance officer . Director in charge of disease control . Multi-agency focal points (2) |
| LEVEL 3 REGIONAL LEVEL | <ul style="list-style-type: none"> . Notification of suspected and confirmed cases . Line listing . Investigation reports . Laboratory results . Instructions to follow . Administrative measures | <ul style="list-style-type: none"> . From time of notification of suspected and confirmed cases . Once to twice a week during an outbreak | <ul style="list-style-type: none"> . Email . Telephone (call, sms) . Mail | <ul style="list-style-type: none"> . Regional health officers |
| LEVEL 2 DISTRICT LEVEL | <ul style="list-style-type: none"> . Notification of suspected and confirmed cases . Line listing . Investigation reports . Laboratory results . Instructions to follow . Administrative measures | <ul style="list-style-type: none"> . From time of notification of suspected cases . Once to twice a week during an outbreak | <ul style="list-style-type: none"> . Email . Telephone (call, sms) . Mail | <ul style="list-style-type: none"> . District chief medical officers . Administrative and traditional authorities and opinion leaders |
| LEVEL 1 HEALTH AREA LEVEL | <ul style="list-style-type: none"> . Notification of suspected cases . Rapid Test results . Actions taken . Line listing | <ul style="list-style-type: none"> . From time of notification of suspected cases . For the duration of the epidemic | <ul style="list-style-type: none"> . Telephone (call, sms) . Mail . Radio | <ul style="list-style-type: none"> . Health center managers . Administrative and traditional authorities and opinion leaders |

(1) **Cross-border focal points (IHR)** were designated after the Abuja Commitments. Refer to **Annex 5 for contacts**.

(2) **Multi-agency focal points** were designated by the various agencies in the countries. Refer to **Annex 5 for contacts**.

Table 2: Cross-border exchange framework for meetings

| LEVEL | WHAT | WHEN | HOW | WHO |
|------------------------------|--|---|---|---|
| CROSS-BORDER MEETING | | | | |
| LEVEL 4 CENTRAL LEVEL | <ul style="list-style-type: none"> . Alert, exchanges and cross-border meetings assessment . Experiences sharing . Lessons learned | <ul style="list-style-type: none"> . Once/year | <ul style="list-style-type: none"> . Cross-border meeting | <ul style="list-style-type: none"> . Cross-border focal points (IHR) . WASH and health multi-agency focal points . Ministries of Hydraulic |
| LEVEL 3 REGIONAL LEVEL | <ul style="list-style-type: none"> . Epidemiological situation . Experience exchanges . Preparedness level . Joint response . Mapping of actors | <ul style="list-style-type: none"> . Quarterly meeting in case of outbreak . Bi-annual meeting when no outbreak | <ul style="list-style-type: none"> . Current framework . Cross-border meeting | <ul style="list-style-type: none"> . Regional Health Directorate . Regions technical and financial partners . Hydraulic directorates, etc. . Administrative authorities (governor, prefect, etc.) |
| LEVEL 2 DISTRICT LEVEL | <ul style="list-style-type: none"> . Epidemiological situation . Experience exchanges . Preparedness level . Joint response . Mapping of actors | <ul style="list-style-type: none"> . Quarterly meeting in case of outbreak . Bi-annual meeting when no outbreak | <ul style="list-style-type: none"> . Current framework (NVD) . Cross-border meeting | <ul style="list-style-type: none"> . District chief medical officers, . Districts technical and financial partners . Administrative and traditional authorities and opinion leaders |
| LEVEL 1 HEALTH AREA LEVEL | <ul style="list-style-type: none"> . Epidemiological situation . Response implications | <ul style="list-style-type: none"> . Ad hoc visit in case of outbreak | <ul style="list-style-type: none"> . Visit . Cross-border meeting organised by the district | <ul style="list-style-type: none"> . Health center managers |

Formalisation of cross-border collaboration

Participants agreed on the steps towards formalisation of the cross-border exchange framework:

- **Presentation of the cross-border exchange framework to the outbreak management committee at national level**
- **Circular of General Secretary of Ministry of Health**
- **Sending of the circular to border areas and districts**
- **Validation of the cross-border exchange framework by the Health Ministry**

Next meetings and exchanges

Participants agreed on a list of priority meetings and epidemiological data exchange (bulletins, notifiable diseases database) on a weekly basis.

- The following **cross-border meetings** were agreed as **priority**:
 - Niger/Nigeria: Borno State, Diffa area
 - Niger/Nigeria: Maradi area, Zinder area, Kano State, Katsina State
 - Cameroon/Nigeria: Borno State, Adamawa State, North region of Cameroon, Far North region of Cameroon
 - Cameroon/Chad/CAR: North region of Cameroon, middle Chari area
- **Multi-agency focal points emails** of the 4 countries (Annex 5) are included in **the mailing list** created to disseminate notifiable diseases situation bulleting and or/databases (notifiable diseases, EDS, MPE, IDSR, etc.)

4. Perspectives: cross-border roadmaps

Cross-border activities roadmap

| Activities | Completion date | Entity in charge | Status (Date) | | | |
|--|-------------------|--|-----------------------------|-----|-----|-----|
| | | | NGR | NGA | CMR | CHA |
| | | | Done/In process/Outstanding | | | |
| Preparedness, prevention and response coordination | | | | | | |
| · Organize a WASH-Health inter-sectorial meeting at national level | 25 April 2014 | FP Lead Agency | | | | |
| · Create a cholera platform at federal level for Nigeria | 9 May 2014 | Nigerian CDC | | | | |
| · Implement crisis committees at decentralized level (region, district) | 2 May 2014 | DLM / DPLM / DSRE | | | | |
| · Actors and response capacity mapping | 9 May 2014 | FP Agency Lead | | | | |
| Preparedness in the border districts | | | | | | |
| · Complete preparedness activities in border districts | 16 May 2014 | DLM / DPLM / DSRE | | | | |
| · Complete the checklist | 25 April 2014 | Surveillance Director | | | | |
| · Compile and disseminate checklist to multi-agency focal points | 2 May 2014 | Cholera Cross-border FP CMR | | | | |
| Prevention in border districts | 2 May 2014 | DLM / DPLM / DSRE | | | | |
| Formalization and diffusion of cross-border exchange framework | | | | | | |
| · Feedback to the Outbreak Management Committee | 25 April 2014 | Ministry of Health Rep attending the meeting | | | | |
| · Circular of the Health General Secretary | 2 May 2014 | DLM / DPLM / DSRE | | | | |
| · Dissemination of circular in districts and regions | 9 May 2014 | Surveillance Director | | | | |
| · Facilitation of cross-border actions (ex. disinfection of dwellings) | From 2nd May 2014 | Surveillance Director | | | | |
| · Integration in contingency and response plans | Plan review | DLM / DPLM / DSRE | | | | |
| Cross-border collaboration | | | | | | |
| · Insertion of email addresses of multi-agency focal points in the dissemination mailing list dedicated to notifiable diseases | 25 April 2014 | Cholera Cross-border FP | | | | |
| · Complete regions and districts directory (Annex 6) | 2 May 2014 | Cholera Cross-border FP | | | | |
| · Plan priority cross-border meetings | From 9th May 2014 | Cholera Cross-border FP | | | | |

Monitoring mechanism

The participants from the 4 countries agreed for the cross-border **roadmap monitoring** to be conducted by **cross-border focal points (IHR)** with the support from **national and regional focal points**.

5. Annex

Annex 1: List of at-risk border areas and districts

Annex 2: Agenda

Annex 3: List of participants

Annex 4: Cholera Preparedness Checklist

Annex 5: Multi-Agency Focal Points Directory for 5 Countries (Lake Chad Basin and CAR)

Annex 6: Regional Health Officers and District Health Practitioners Directory

Annex 7: Cross-border roadmap in Lake Chad Basin