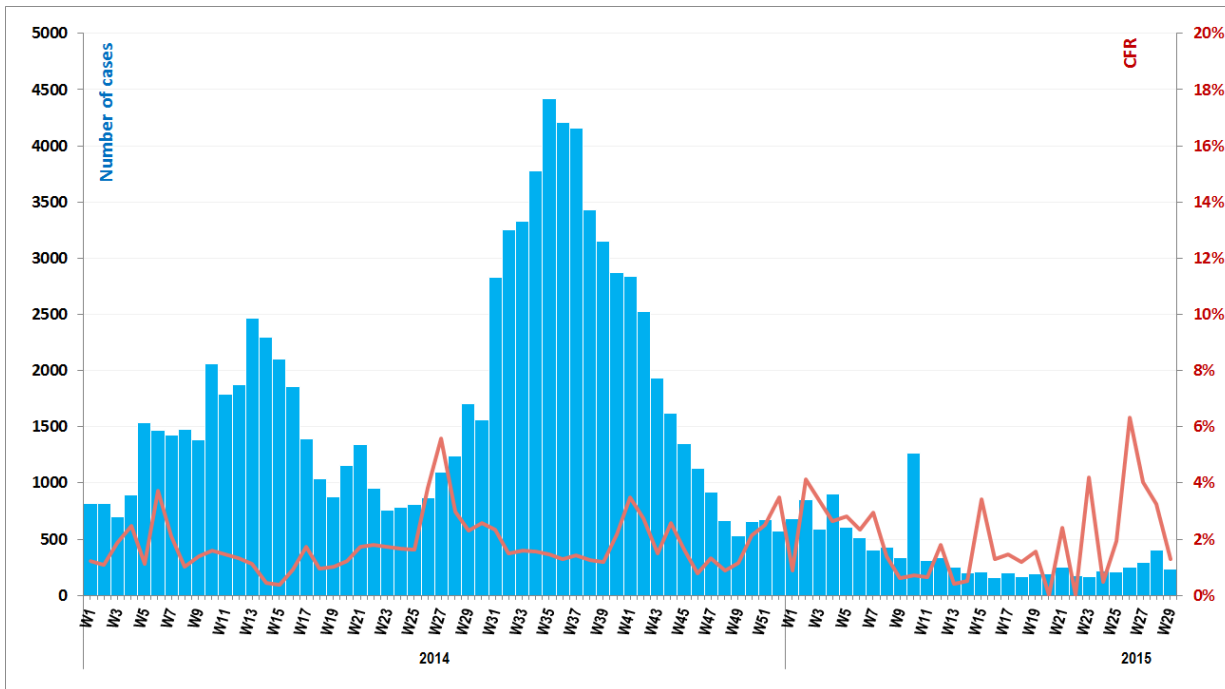


Cholera outbreak in the West and Central Africa: Regional Update, 2015 (Week 29)

Country Name	Cases in 2015																				Trends on CFR 2015			Onset week, 2014	Total 2015			Cases in 2014		
	w1-5	w6-10	w11	w12	w13	w14	w15	w16	w17	w18	w19	w20	w21	w22	w23	w24	w25	w26	w27	w28	w29	W27	W28		W29	Cases	Deaths	CFR	Week1-29	Total
Sierra Leone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%		-	-	0.0%	-	-
Congo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%		-	-	0.0%	-	-
Guinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%		-	-	0.0%	2	2
Guinea Bissau	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%		-	-	0.0%	18	18
Chad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%		-	-	0.0%	-	14
Liberia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%		-	-	0.0%	60	60
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%		-	-	0.0%	319	874
Togo	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	Week 1	50	2	4.0%	39	329
Niger	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	Week 1	51	4	7.8%	279	2,059
Cote d'Ivoire	110	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	Week 1	126	2	1.6%	10	248
Cameroon	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0.0%	0.0%	0.0%	Week 8	6	1	16.7%	1,274	3,355
Ghana	91	267	85	55	36	13	8	10	4	6	6	7	5	0	25	18	0	5	2	0	40.0%	0.0%	0.0%	Week 1	643	8	1.2%	480	28,944	
DR Congo	2623	1534	204	235	215	181	138	125	184	142	139	185	183	168	139	180	141	144	132	119	49	0.0%	0.0%	2.0%	Week 1	7,160	69	1.0%	10,217	19,305
Nigeria	703	1125	23	42	0	7	59	22	16	21	47	0	59	9	28	7	48	100	160	278	185	6.3%	4.7%	1.1%	Week 1	2,939	147	5.0%	26,267	35,996
Lake Chad River Basin*	754	1,127	23	42	-	7	59	22	16	21	47	-	60	9	28	10	48	100	160	278	185					2,996	152	5.1%	27,820	41,424
Congo River Basin*	2,623	1,534	204	235	215	181	138	125	184	142	139	185	183	168	139	180	141	144	132	119	49					7,160	69	1.0%	10,217	19,305
Guinea Gulf Basin*	251	283	85	55	36	13	8	10	4	6	6	7	5	-	-	25	18	-	5	2	-					819	12	1.5%	928	30,475
WCAR	3,628	2,944	312	332	251	201	205	157	204	169	192	192	248	177	167	215	207	244	297	399	234					10,975	233	2.1%	38,965	91,204

* Niger river basin : Nigeria, Niger, Mali

Cholera cases trend in WCA, 2014 and 2015 (Week 29)



COMMENTS

Au 19 juillet 2015, la région de l'Afrique de l'Ouest et du Centre (AOC) a enregistré environ 10 975 cas et 233 décès (Let. = 2.1%) de choléra dans 7 pays. Comparativement à la même époque en 2014, on note dans la région 72% de cas rapportés en moins.

Les données des dernières semaines indiquent une persistance des cas au Nigeria et en RDC.

Au Nigeria, pour la première fois depuis le début de l'année, des cas ont été signalés dans l'état de Bauchi (LGA de Bauchi, Dass, Gamawa, Ganjuwa, Tafawa-Balewa, Toro), dans l'état de Benue state (LGA Obi) et dans l'état de Lagos (LGA de Badagry, Eti Osa).

En RDC la tendance est à la baisse. Dans la province du Sud Kivu, pour la première fois depuis de l'année, on note zéro cas de choléra rapporté en semaine 29 dans l'ensemble des zones de santé. A la semaine 28, on notait 5 cas à Kadutu et 5 cas à Minova. Dans la province du Maniama, pour la première fois aussi, des cas sont rapportés à partir de la semaine 26 (district de santé de Lubutu).

As of 19 July 2015, 10 975 cases and 233 deaths (CFR = 2.1%) of cholera have been registered in 7 countries of the West and Central Africa (WCA) region. Compared with the same period in 2014, we observe a reduction of 72% in reported cases.

Data from the past few weeks indicate a persistent of cholera cases in Nigeria and DRC.

In Nigeria, for the first time since the beginning of the year, cases were reported in Bauchi state (LGAs Bauchi, Dass, Gamawa, Ganjuwa, Tafawa-Balewa, Toro), in Benue state (LGA Obi), and in Lagos state (LGAs Badagry, Eti Osa).

In DRC the trend is downward. In the province of South Kivu, for the first time since the beginning of the year, zero case was reported across all health zones during the week 29. During week 28, 5 cases were reported in Kadutu and 5 cases in Minova. In the province of Maniama, for the first time also, new cases were reported from week 26 (Lubutu Health District).

Figure 1. Yearly number of cholera cases and case fatality rate (CFR) in Nigeria, 1990–2013¹

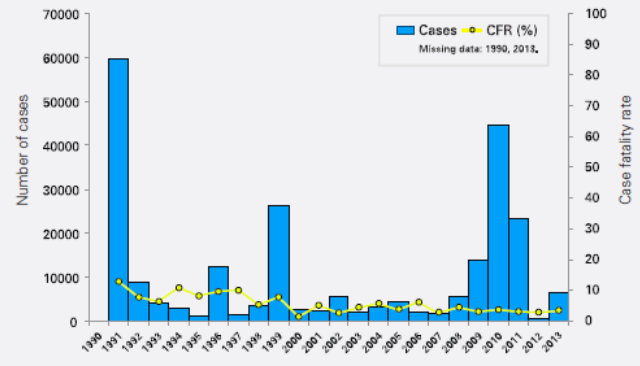


Figure 4. Summary of cholera hotspots in Nigeria by LGA, 2010–2014³

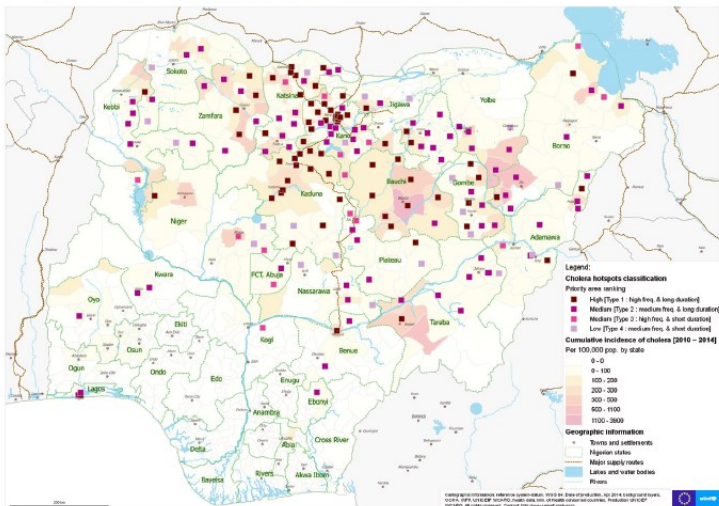


Figure 2. Cumulative incidence of cholera by state in Nigeria, 2004–2014²

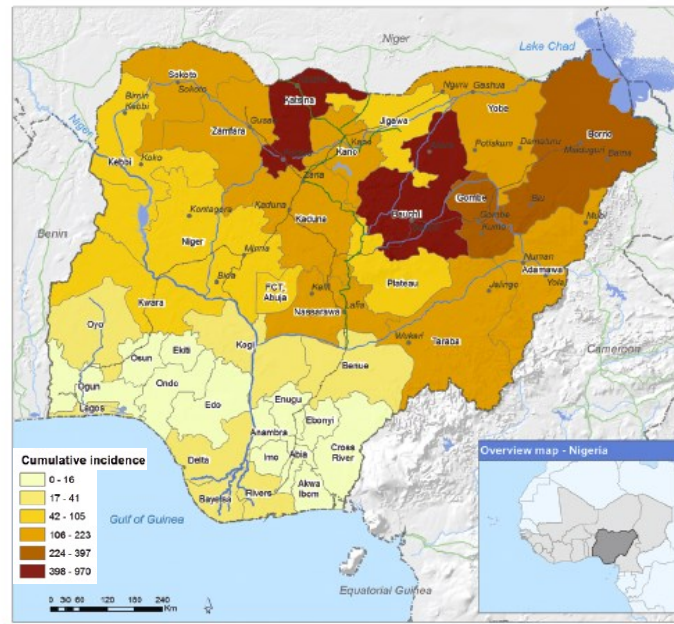


Figure 3. Weekly number of cholera cases and median of estimated ten-day precipitation in Nigeria, 2010–2014⁴

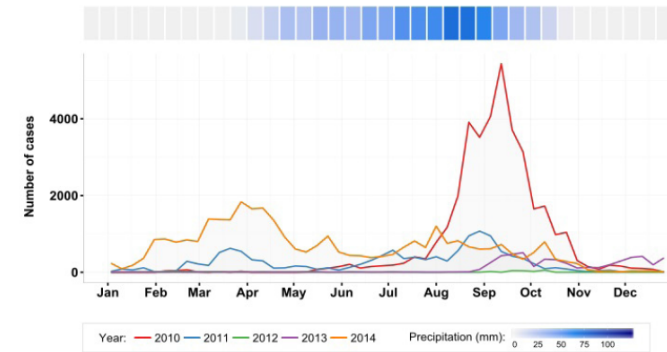
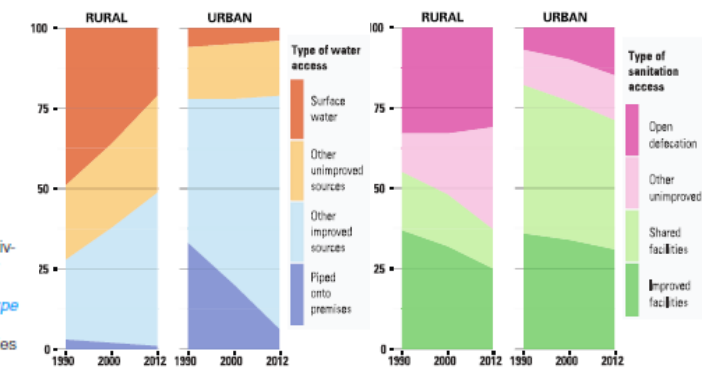


Figure 5. Water and sanitation coverage estimates in Nigeria, 1990–2012⁷



STRATEGIC RECOMMENDATIONS

Outbreak onset and cross-border spread are frequently occurring in northern states (**Zamfara, Katsina, Kano, Kaduna, Bauchi and Adamawa**). High-risk cholera areas are located on corridors where outbreaks spread from and to neighboring countries, mainly Niger, Chad and Cameroon highlighting the importance of cross-border activities⁵.

Sustainable Water, Sanitation and Hygiene activities (WASH) should be carried out in regularly affected priority LGAs, especially those with and without outbreaks of long duration (*Fig. 4, Type 1*). A 2010 WASH and epidemiological study conducted in the four Lake Chad basin countries shows that the use of water from open wells in northern Nigerian states is a risk factor of cholera epidemics⁶. The study recommends the replacement of open wells by boreholes or protected wells, the development of household water treatment methods and the scaling up of Community-Led Total Sanitation (rural setting). Furthermore, testing and increasing the level of free residual chlorine (post chlorination dosing pump) of water from water networks and from the water sold by street vendors should be performed in major affected cities in northern Nigeria (Bauchi, Katsina, Kano, Maiduguri, Gombe, Gusau and Sokoto).

In regularly affected states and LGAs, preparedness and response plans should be developed and implemented including: (1) strengthening early detection and rapid response systems of which community based surveillance and cross-border alert; (2) setting up coordination mechanisms across the sectors and borders; (3) building capacity on outbreak management; (4) targeted pre-positioning of supplies and (5) preparing communications messages and plans (*Fig. 4*). Because of the high CFR, training on outbreak management and pre-positioning of supplies are highly recommended in targeted LGAs.

The benefit and feasibility of using Oral Cholera Vaccines in identified cholera hotspots and high risk groups should be assessed (*Fig. 4*).

CHOLERA DISTRIBUTION

During the past ten years, the northern part of Nigeria has experienced multiple large cholera outbreaks, which were associated with significant mortality (*Fig. 2 and Tab. 1*).

The states of **Katsina, Kano, Bauchi, Borno and Gombe** notified two thirds (66%) of the cases reported in Nigeria between 2004 and 2014. Other surrounding states were less often affected with in north-west **Sokoto and Zamfara** states bordering Niger (outbreaks in five and four years, respectively), in the center **Kaduna** state (five years) and in the east **Taraba** state along Cameroon border (six years) (*Tab. 1*). In the northern states, an increase in the number of reported cases is observed at the end of the dry season (February and May) and during the rainy season (June to October) followed by a sharp decrease from mid-November (*Fig. 3*).

CHOLERA HOTSPOT IDENTIFICATION

Cholera hotspots at Local Government Area (LGA) level are mainly located in the northern states with the highest numbers for the states of **Katsina, Kano, Kaduna** (northern part), **Bauchi and Gombe**. Beyond these foci, several other LGAs also have recurrent, significant outbreaks: bordering Lake Chad in **Borno** state, along the main roads and in large towns in **Kebbi, Sokoto and Zamfara** states, bordering Cameroon in **Adamawa** state, along the Benue River in **Benue and Taraba** states and along the main Kano–Makurdi road (**Benue** state). In the south, **Lagos** remains a high priority area along the shore of the Gulf of Guinea (*Fig. 4*).

Livelihood groups and practices at risk to be considered in prevention, preparedness and response strategies^{2,6}:

- funeral rituals, patients care and home visits (northern states);
- informal trade, migrant fishermen and nomadic communities around the shores of Lake Chad and along borders with Niger, Chad and Cameroon;
- formal and informal trade between main cities in Niger (Maradi, Zinder), in Nigeria (Katsina, Sokoto, Kano, Kaduna and Bauchi) and along the shores of Lake Chad (Nguigmi, Maiduguri, Bagai);
- cross-border markets along borders with Niger and Cameroon;
- traders and bus drivers on the coastal road Accra–Lagos.