



# OUTBREAK BULLETIN

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## Introduction

In this issue, a general overview of outbreaks that occurred within the WHO African Region between January and August 2012 is provided as well as a summary of ongoing outbreaks as reported by the Member States.

## Overview of reported outbreaks in WHO African Region

Based on data received from the Early Warning System through the Event Management System (EMS)\*, 56 public health events were reported to the Regional Office covering the period January - August 2012 of which 89% were due to infectious diseases. The distribution of these events by hazard and country is shown in Table 1 and Figure 1 below.

Table 1. Hazards and diseases/conditions reported in the WHO African Region (January - August 2012)

Hazard	Disease condition	Total	
<b>Disaster</b>	Explosion of an arms depot	1	
	Armed Conflict	1	
	Land slide	1	
<b>Food Safety</b>	Acute food poisoning	1	
<b>Infectious</b>	Anthrax	3	
	Cholera	23	
	Lassa Fever	1	
	Measles	2	
	Meningococcal disease	11	
	Polio	2	
	Yellow Fever	3	
	Ebola Haemorrhagic Fever	2	
	Dysentery	3	
	<b>Nutritional deficiency</b>	Kwashiorkor	1
	<b>Undetermined</b>	Nodding syndrome	1
<b>Total events</b>		<b>56</b>	

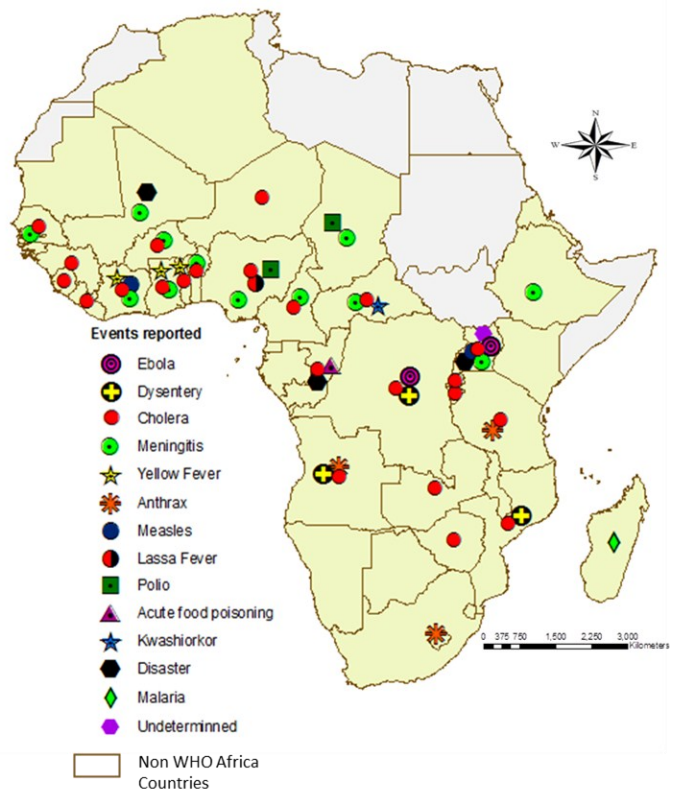


Fig. 1. Geographic distribution of acute public health events in the WHO African Region (January - August 2012)

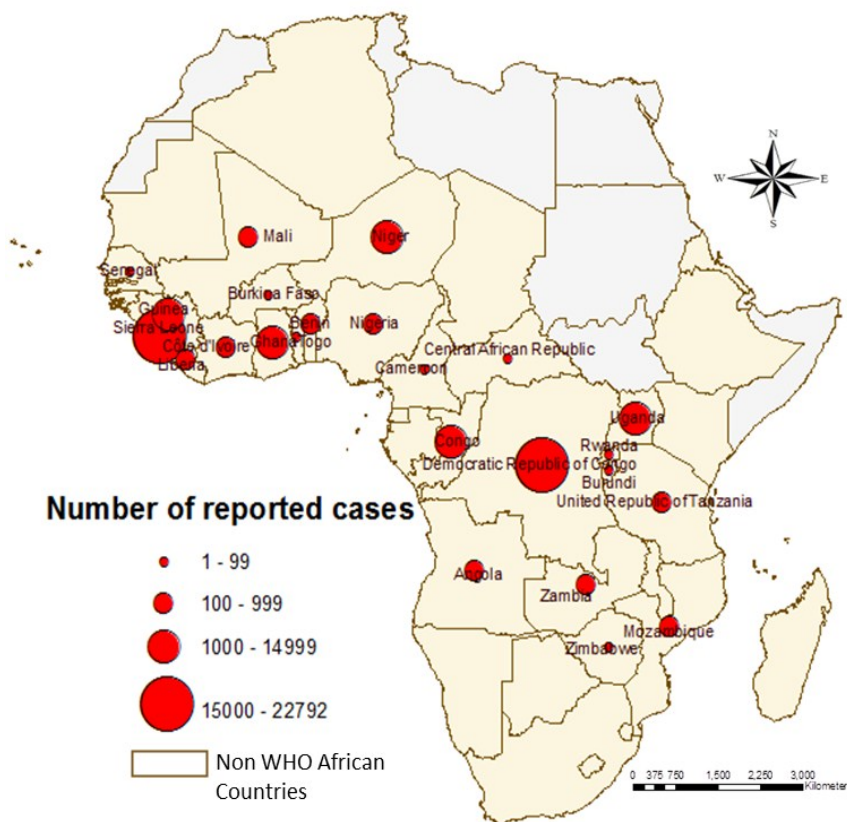
\*EMS is a WHO web-based application that supports the process of epidemic intelligence detection, verification, risk assessment and monitoring.

### Cholera

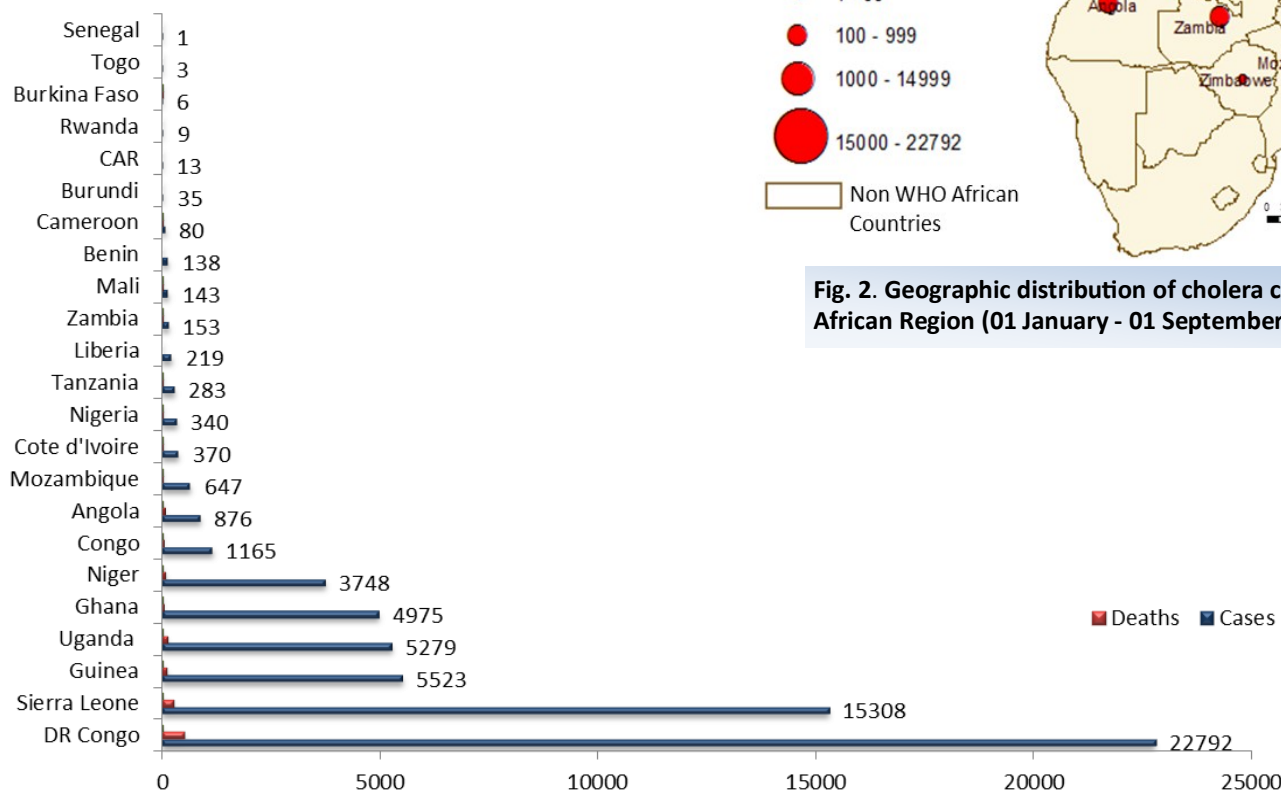
Between 01 January and 01 September 2012, a total of 62 106 cases and 1 246 deaths were reported from 23 countries resulting in a CFR of 2.0% (Table 2). DR Congo, Sierra Leone, Guinea, Uganda, Ghana and Niger accounted for 92% of the total number of cases and 88% of all deaths. Figure 2 shows the geographic distribution of cholera cases by country and Figure 3 the distribution of cholera cases and deaths by country in the region.

**Table 2. Cholera cases and deaths in the 6 most affected countries (01 January - 01 September 2012)**

Country	Cases	Deaths	CFR%
DR Congo	22792	512	2.2
Sierra Leone	15308	249	1.6
Guinea	5523	105	1.9
Uganda	5279	118	2.2
Ghana	4975	38	0.8
Niger	3748	75	2.0
<b>Total</b>	<b>57625</b>	<b>1097</b>	<b>1.9</b>



**Fig. 2. Geographic distribution of cholera cases in the WHO African Region (01 January - 01 September 2012)**



**Fig. 3. Distribution of cholera cases and deaths by country (01 January - 01 September 2012)**

In response to cholera outbreaks, support was provided to the respective Ministries of Health in the areas of surveillance, case management, sensitization of the population and data management. WHO AFRO deployed international and regional experts, cholera supplies and other supplies to the affected countries.

## Ongoing outbreaks

### 1. Cholera in Sierra Leone, Guinea and Liberia

**Sierra Leone:** The Ministry of Health in Sierra Leone declared an outbreak of cholera in 12 out of 13 districts: Bo, Bombali, Bonthe, Kambia, Kono, Moyamba, Port Loko, Pujehun, Tonkolili, Kenema, Koinadugu and Western Area (that includes Freetown the capital city). The Government declared the cholera outbreak as a “humanitarian crisis”.

As of the 06 September 2012, a total of **16 884** cases with **257** deaths (CFR=1.5%) had been reported.

**Guinea:** Between 02 February and 01 September 2012, **5 523** cases and **105** deaths (CFR: 1.9%) had been reported from 10 districts.

**Liberia:** The last confirmed cholera cases were reported on 25 March 2012.

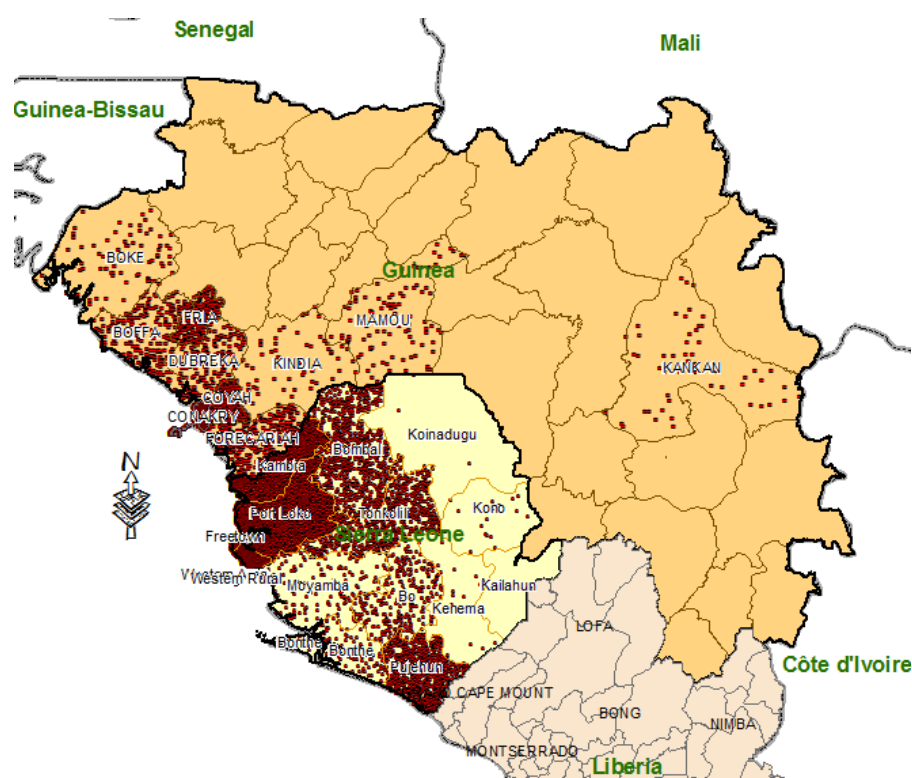
Additional information on cholera outbreaks in Guinea, Sierra Leone and Liberia is given in the following tables, maps and graphs.

**Table 3: Sierra Leone:** cases and deaths by district

District	Cases	Deaths	CFR%
Western Area	8593	87	1.0
Port Loko	3211	56	1.7
Kambia	1297	31	2.4
Pujehun	842	12	1.4
Bo	360	8	2.2
Bombali	1069	15	1.4
Moyamba	199	13	6.5
Tonkolili	861	31	3.6
Bonthe	162	3	1.9
Kono	79	0	0.0
Kenema	185	1	0.0
Koinadugu	26	0	0.0
<b>Total</b>	<b>16884</b>	<b>257</b>	<b>1.5</b>

**Table 4: Guinea:** cases and deaths by district

Districts	Cases	Deaths	CFR%
Conakry	3630	23	0.6
Coyah	481	7	1.5
Forecariah	328	28	8.5
Fria	290	8	2.8
Boffa	219	11	5.0
Dubr�ka	215	5	2.3
Mamou	107	10	9.3
Bok�	125	5	4.0
Kindia	75	3	4.0
Kankan	53	5	9.4
<b>TOTAL</b>	<b>5523</b>	<b>105</b>	<b>1.9</b>



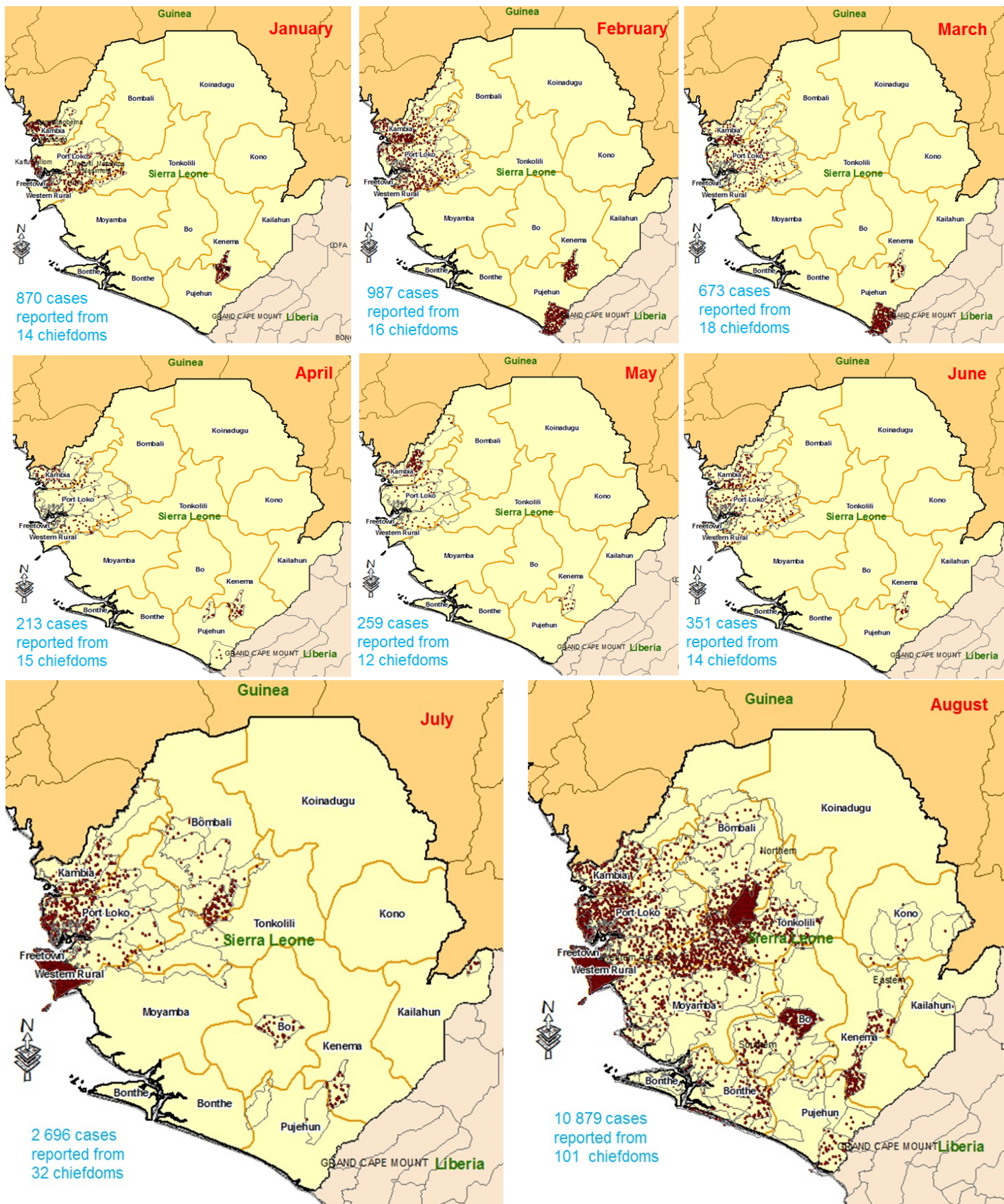
**Fig. 4. Geographic distribution of cholera cases in Sierra Leone and Guinea (01 January - 06 September 2012)**

WHO in collaboration with partners is supporting Ministries of Health in the affected countries in the areas of coordination; case management and logistics; surveillance and data management; social mobilization and WASH. A Cholera Command and Control Centre (C4) has been established in Freetown for better coordination of the cholera response. The first C4 meeting was held on 28 August 2012 and subsequently meetings have been held daily.

Through the Global Outbreak Alert and Response Network (GOARN) three cholera experts from the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) have been deployed to Sierra Leone in support of the cholera response.



Fig 5. Sierra Leone: Geographic monthly distribution of cholera cases by chiefdom (total number of chiefdoms is 150)



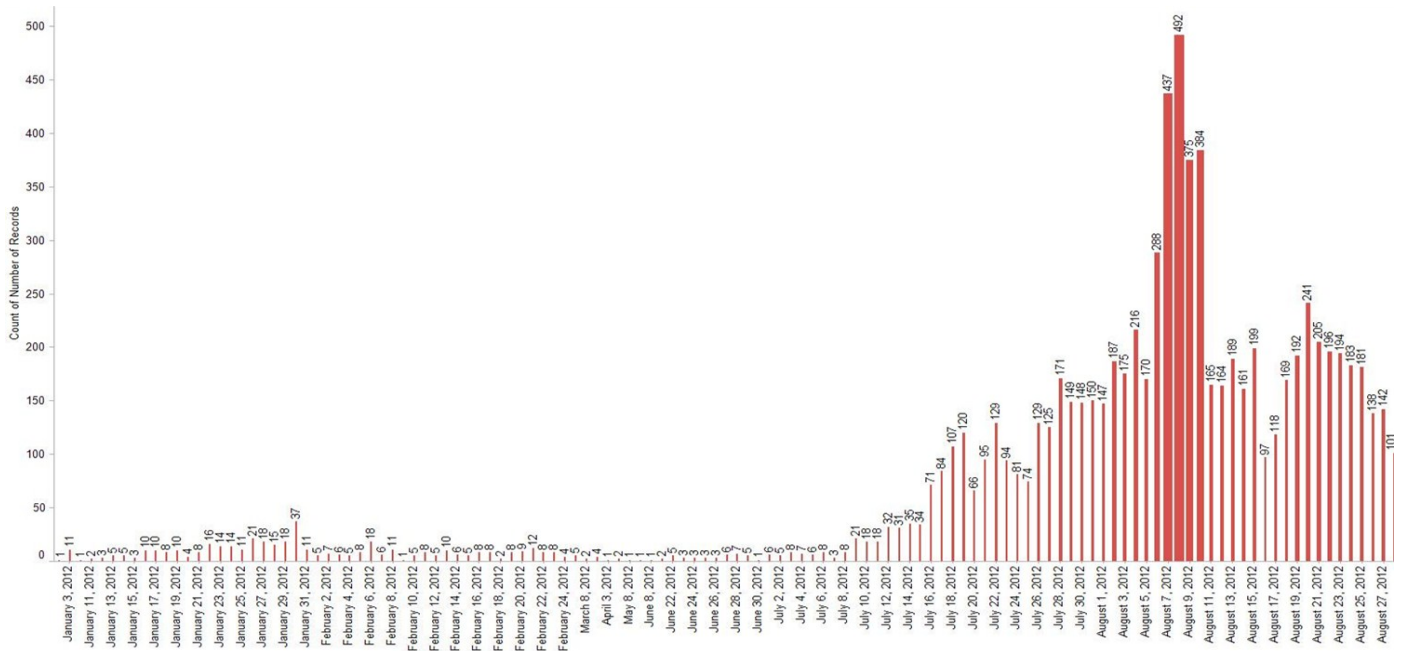


Fig 6. Sierra Leone: Cholera epidemic curve ( as at 27 August 2012 )

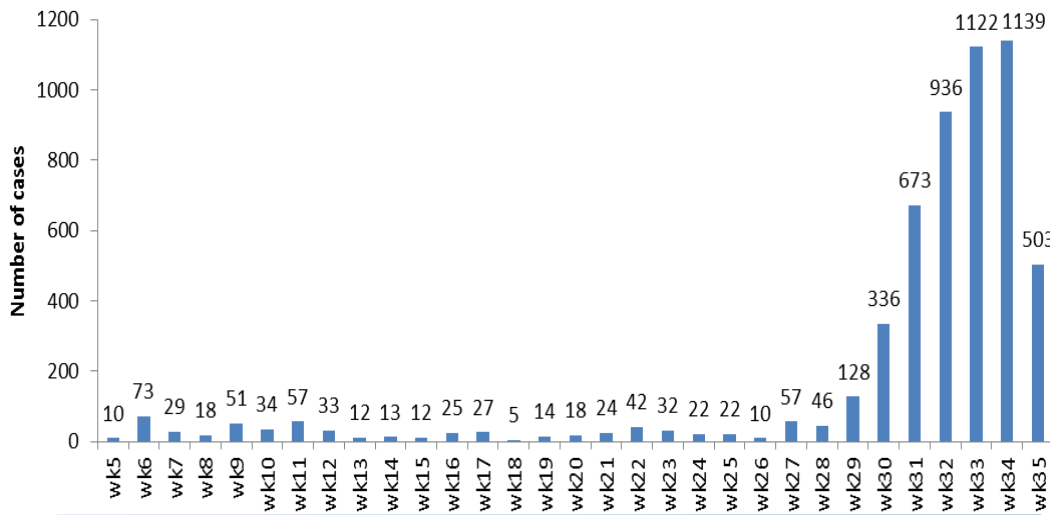


Fig 7. Guinea: Distribution of cholera cases by week (01 January - 2 September 2012 )

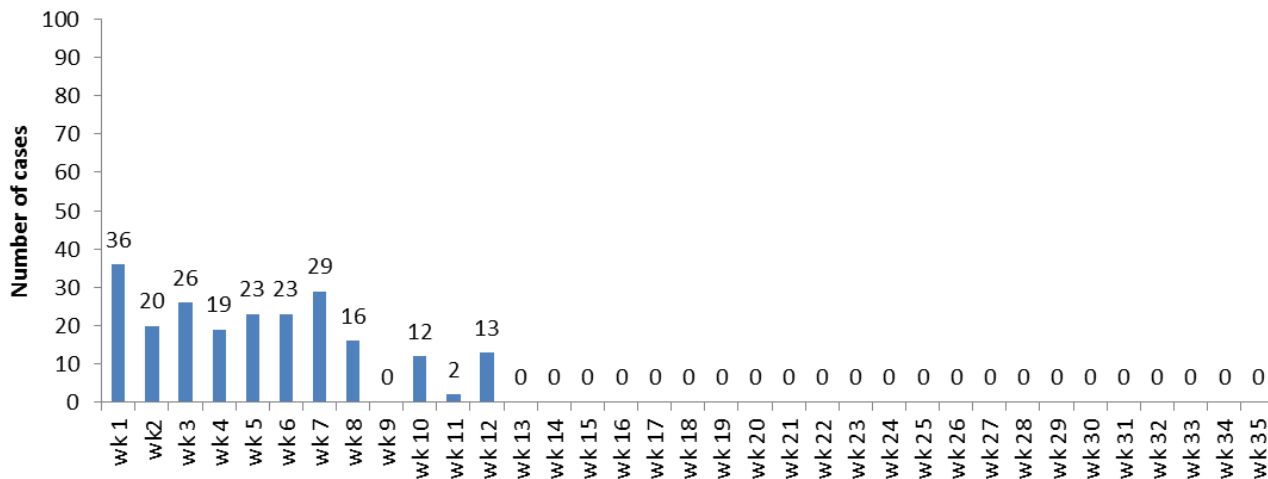


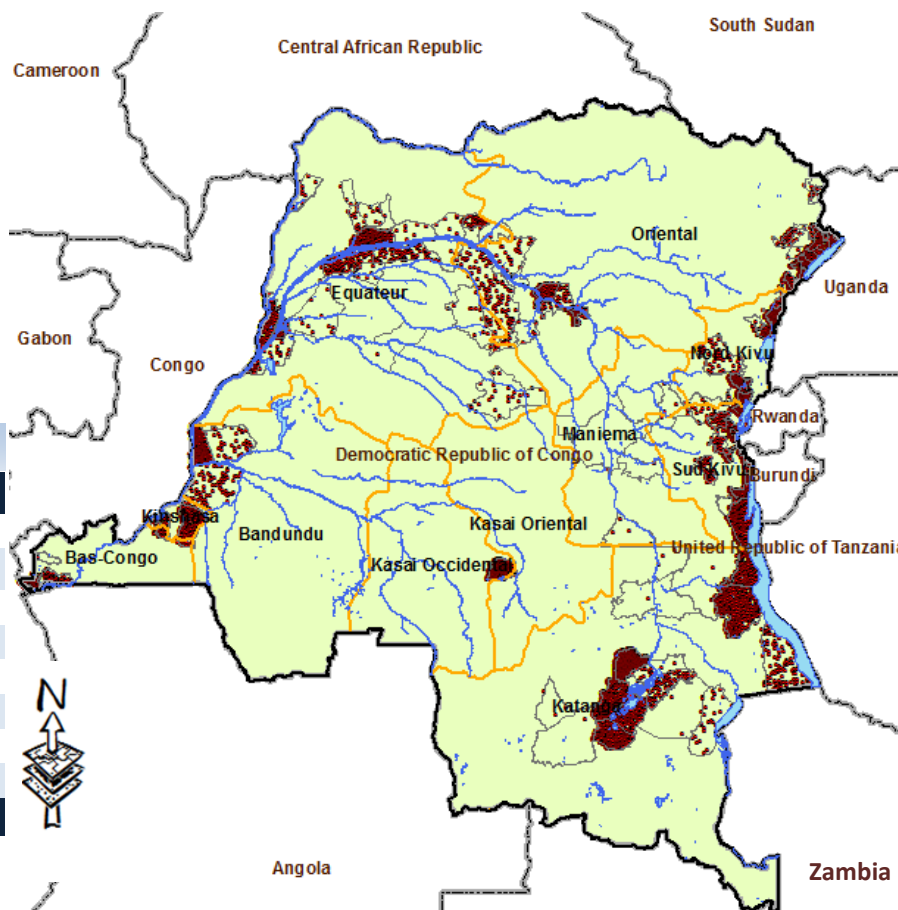
Fig 8. Liberia: Distribution of cholera cases by week (01 January - 2 September 2012 )

## 2. Cholera in DR Congo

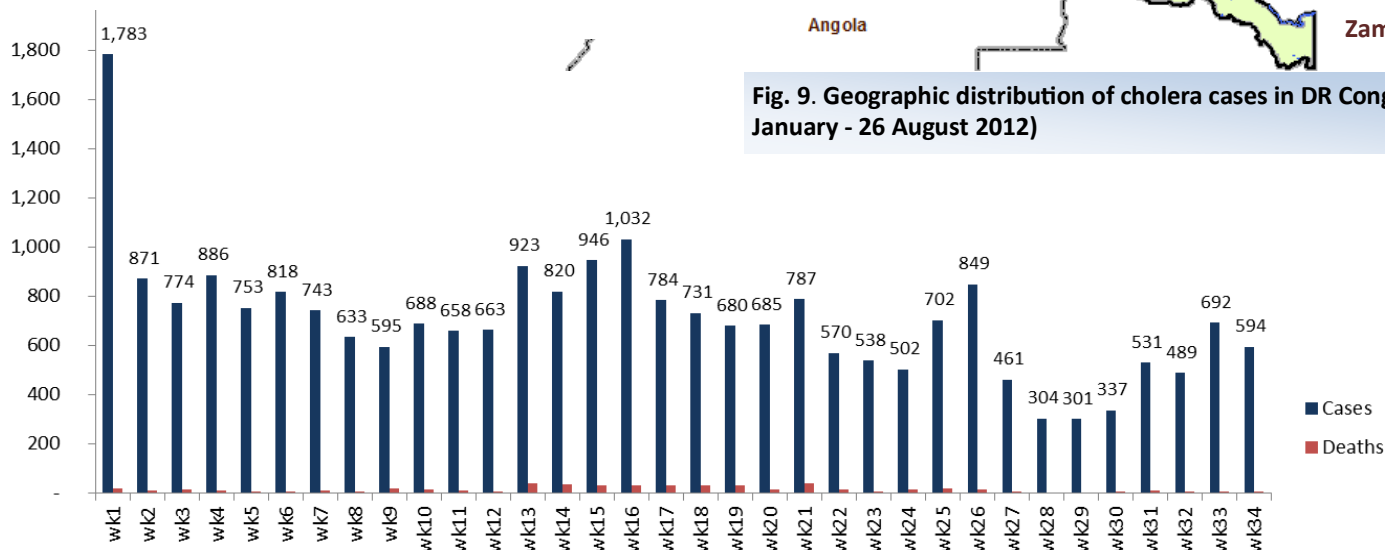
DR Congo continues to experience a cholera outbreak. Between 01 January and 26 August 2012, a total of 22 792 cases with 512 deaths (CFR: 2%) were reported from 8 out of 11 provinces as shown in table 5.

**Table 5: cases and deaths by province**

Province	Cases	Deaths	CFR%
Orientale	5425	205	3.8
North Kivu	5144	42	0.8
South-Kivu	3550	20	0.6
Katanga	2954	66	2.2
Equateur	2454	122	5.0
Bas-Congo	1210	19	1.6
Bandundu	1167	19	1.6
Kinshasa	888	19	2.1
<b>Total</b>	<b>22792</b>	<b>512</b>	<b>2.2</b>



**Fig. 9. Geographic distribution of cholera cases in DR Congo (01 January - 26 August 2012)**



**Fig. 10. Weekly distribution of cholera cases and deaths (01 January - 06 September 2012)**

WHO is working closely with other partners to strengthen epidemiological surveillance and has provided emergency supplies (cholera kits).

Communities have been sensitized about improving hygiene, food handling, and sanitation practices to prevent cholera. However, it should be noted that substantial investments in water and sanitation infrastructure are required in order to effectively control the cholera epidemic.

### 3. Cholera in Zambia

Zambia is experiencing a cholera outbreak in the district of Mpulungu in northern Province since 03 August 2012. As of 27 August 2012, a total of 153 cases and 2 deaths (CFR: 1.3%) had been reported. The majority (54%) of the patients are below 15 years of age.

Of the 33 stool samples collected, 22 tested positive for *Vibrio cholerae*. Currently the disease is confined to Mpulungu District though it has the potential of spreading since the district has inadequate access to clean water due to a water supply system breakdown.

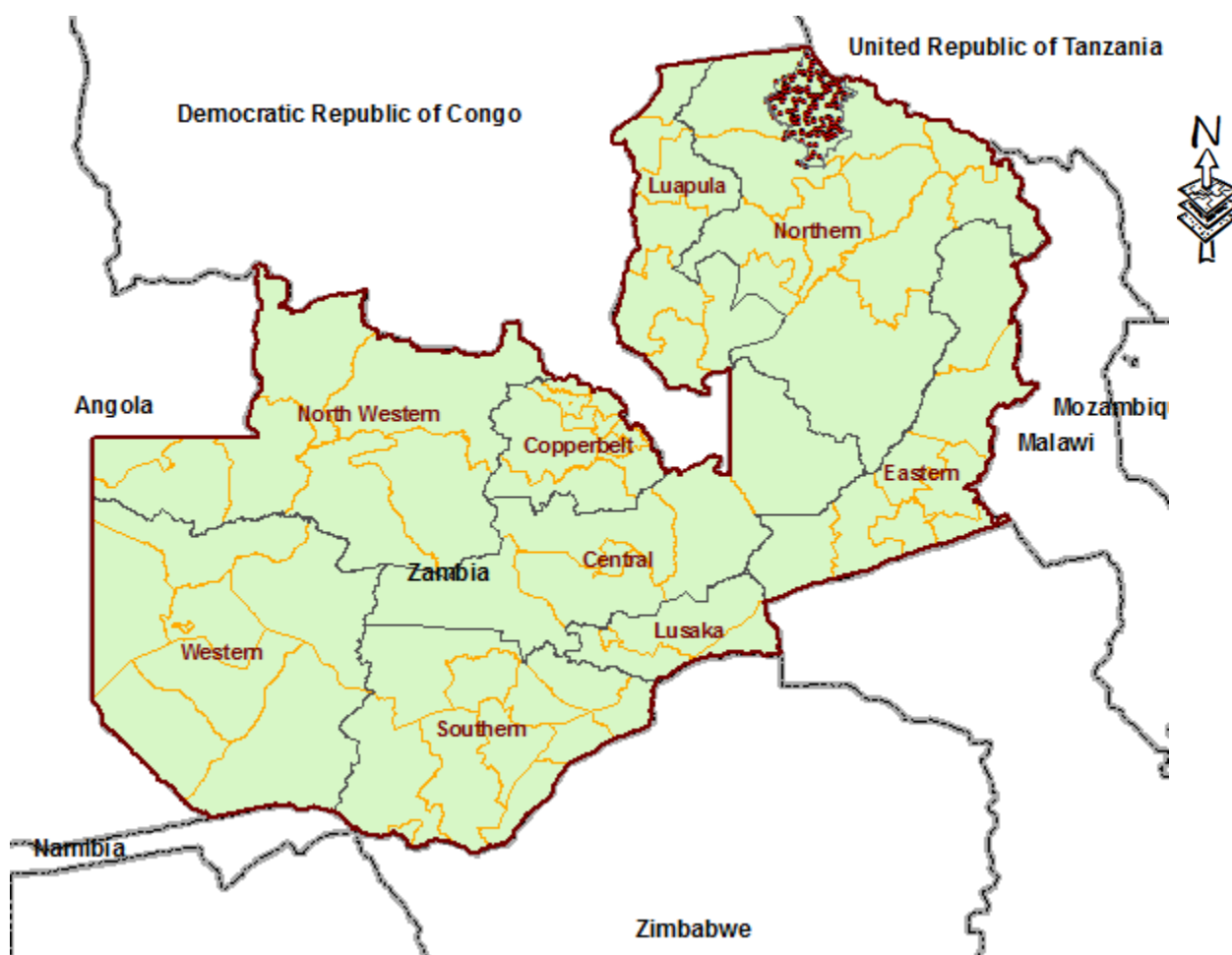


Fig. 11. Geographic distribution of cholera cases in Zambia (27 August 2012)

Health education, distribution of chlorine and provision of potable safe drinking water in addition to case management are ongoing. A cholera treatment centre has been set up to accommodate the increased number of patients. However, the district is experiencing challenges in timely data collection and reporting.

The district administration has requested the local water utility company to ensure adequate safe water supply to control the spread of the disease.



## 4. Ebola in DR Congo

The Ministry of Health (MoH) of the Democratic Republic of Congo (DRC) declared an outbreak of Ebola on 17 August 2012. As of 8 September 2012, a total of 29 (15 suspected, 6 probable and 8 confirmed) cases and 15 deaths had been reported from Haute Uelé district in Province Orientale. The reported cases and deaths have occurred in 2 health zones i.e. 19 cases and 12 deaths in Isiro and 10 cases and 3 deaths in Viadana. The fatal cases in Isiro include three health-care workers. There have been no confirmed cases of Ebola reported outside Haute Uelé district.



**Fig. 12. Geographic distribution of Ebola in DR Congo (8 September 2012)**

WHO AFRO in collaboration with HQ deployed field laboratory sampling kits, PPEs, disinfectants, body bags, and field communication equipment to support response. A National Task Force convened by the Congolese Ministry of Health is working with several partners including WHO, Médecins Sans Frontières (MSF), International Federation of Red Cross and Red Crescent Societies (IFRC) and CDC to control the outbreak. CDC has established a field laboratory that enables rapid confirmation of cases. The initial cases were confirmed at Uganda Virus Research Institute in Entebbe, Uganda.

WHO has deployed epidemiologists and logisticians from AFRO regional office (including the Inter-country Support team) and WHO headquarters to support the MoH and is working closely with partners in the areas of coordination, surveillance, epidemiology, case management, infection prevention and control, logistics for outbreak, public information and social mobilization. An anthropologist mobilized through Global Outbreak Alert and Response Network is conducting research into better understanding of social and anthropological issues among the affected population that could impact the on-going response efforts.



### 5. Ebola in Uganda

On 24 July 2012, the Ministry of Health (MoH) of Uganda notified WHO of an outbreak of Ebola haemorrhagic fever from Kibaale district, mid-western Uganda.

A total of 24 probable and confirmed cases including 17 deaths have been reported since the beginning of the outbreak. Of these, 11 cases were laboratory confirmed by the Uganda Virus Research Institute (UVRI) in Entebbe. The last confirmed case was discharged on 24 August 2012. There have been no new confirmed cases of Ebola haemorrhagic fever reported in Kibaale district, Uganda, since 3 August 2012.

All contacts of probable and confirmed cases have been followed up daily and have completed the recommended 21 days of monitoring for any possible signs or symptoms of Ebola.

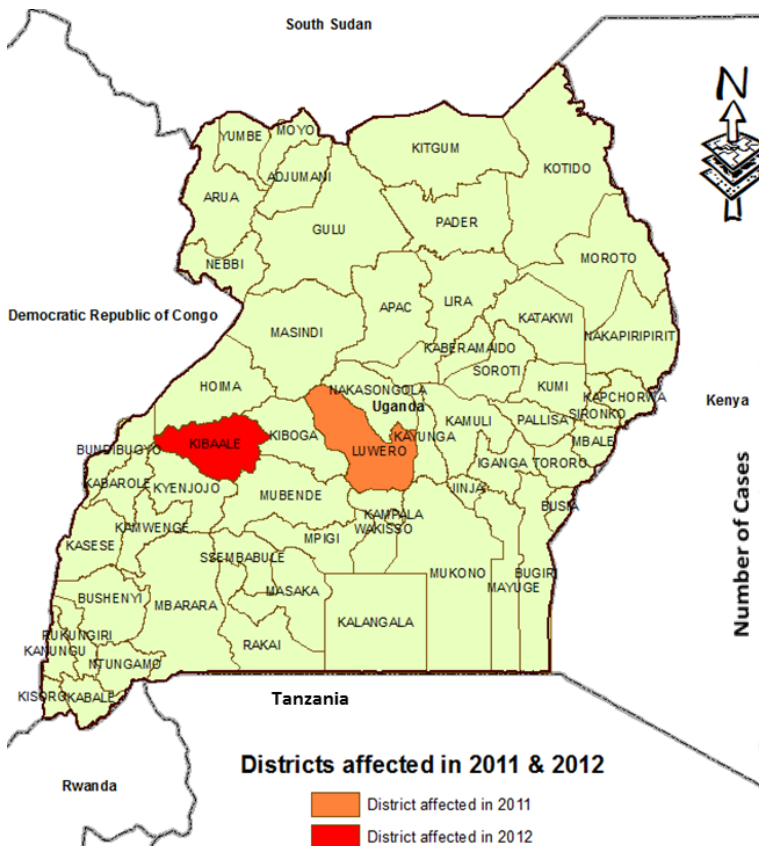


Fig. 13. Geographic distribution of Ebola in Uganda, 5 September 2012

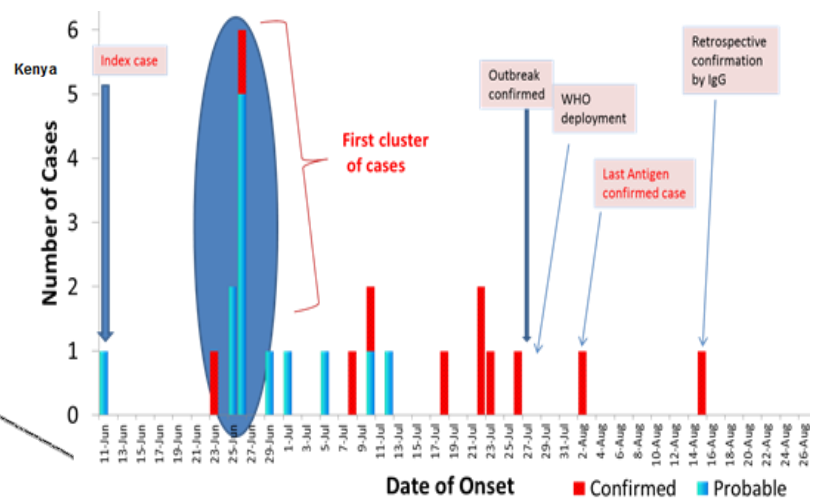


Fig. 14. Epidemic Curve

WHO AFRO in collaboration with HQ deployed field laboratory sampling kits, PPEs, disinfectants, body bags, and field communication equipment to support response; PPEs were also sent to 2 neighboring countries (Kenya and Rwanda) to strengthen preparedness.

The partners who are involved in the response to the Ebola outbreak are transferring capacity to national and district authorities to sustain the essential functions, including enhanced surveillance and response, psychosocial support and infection prevention and control in health care facilities.

The ecological studies team in Kibaale district has collected samples from bats, primates and livestock to study the possible reservoir of the Ebola virus.



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DISEASE SURVEILLANCE AND RESPONSE PROGRAMME AREA

DISEASE PREVENTION AND CONTROL CLUSTER

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