

SITREP 2 Ebola Virus Disease, West Africa

Date of issue: 17 April 2014

1. Situation update

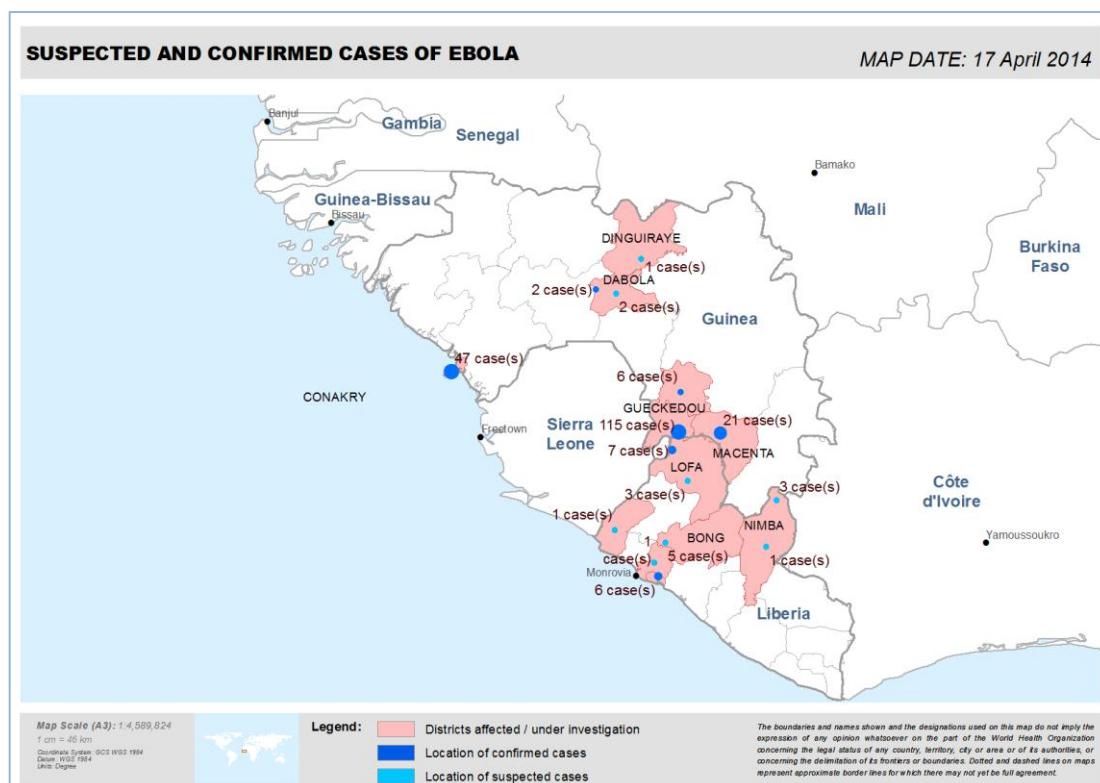
An outbreak of Ebola Virus Disease (EVD) in West Africa, with onset in December 2013, has rapidly evolved from the epicentre of Guékédou in the forested area of south-eastern Guinea to affect 5 additional areas, including the capital, Conakry, as well as Liberia, Mali and Sierra Leone. Sequencing and phylogenetic analysis has shown that the ebolavirus causing this outbreak is a strain of Ebola Zaire, the most virulent of the ebolavirus species with case fatality rates of 60-90%. This is the first outbreak of EVD in West Africa (except for a single case of Ebola Côte d'Ivoire in 1994) and the first time EVD has affected cities. As of 16 April 2014, the Ministry of Health in Guinea has reported a cumulative total of 197 clinically compatible cases, including 122 deaths, of which 101 are laboratory confirmed by PCR. Guinea has reported 23 clinical cases in health care workers (18 laboratory confirmed and 5 probable cases, with 13 deaths). The date of onset of the most recent cases in Guinea is 15 April.

The Ministry of Health and Social Welfare (MOHSW) of Liberia has reported a cumulative total of 6 laboratory confirmed cases and 21 suspected and probable cases of Ebola Virus Disease (EVD). In Liberia, 13 deaths are being attributed to EVD while awaiting laboratory results.

Sierra Leone has enhanced its surveillance and prevention activities for viral haemorrhagic fevers following the death of 2 probable cases of EVD in one family who died in Guinea and their bodies repatriated to Sierra Leone. Mali had previously reported a cumulative total of 8 suspected cases, all of whom have tested negative for EVD.

As the incubation period for EVD can be up to three weeks, it is likely that the Guinean and Liberian health authorities will report new cases in the coming weeks and additional suspected cases may also be identified in neighbouring countries.

Map



As this is a rapidly changing situation, the number of reported cases and deaths, contacts under medical observation and the number of laboratory results are subject to change due to enhanced surveillance and contact tracing activities, ongoing laboratory investigations and consolidation of case, contact and laboratory data.

Current risk assessment

- There is a moderate to high likelihood that the outbreak of EVD in Guinea will require intensive surveillance and response activities for the next 2-4 months. This estimate is based on the date of onset of the most recent laboratory confirmed cases, and the number of reported clinical cases and contacts requiring follow-up. Human resource management and financial resource mobilisation will need to continue to cover this period of intervention.
- This is the first time that an EVD outbreak has been reported from Guinea and Liberia.
- Cases are occurring in both rural and urban area making the outbreak logistics needed to deploy and maintain multiple teams of experts in the field simultaneously a much larger and more complex undertaking than in previous viral haemorrhagic fever outbreaks.
- Conakry, the capital city of Guinea, has reported 47 cases, including 16 deaths, so far.
- A number of health care workers are among the cases and deaths, health facilities serving as amplifier of the EVD.
- There has been cross-border transmission of EVD, with implication on measures to be taken at borders.
- Intense media interest calling for timely dissemination of information on the outbreak.
- The consequences of this outbreak include the loss of life due to the high case fatality rates of Ebola Zaire and similar ebolavirus strains, the loss of human capital in terms of health care worker illness and death, the stigmatisation of patients, their families and communities, the need for psychosocial support and the socioeconomic consequences of this outbreak e.g. through loss of domestic trade, international travel and the closing of international borders in some cases.

WHO's strategic approach to the prevention, detection and control of EVD

The elements of WHO's strategy for the prevention and control of EVD (and other viral haemorrhagic fevers) are:

1. Coordination of response and preparedness activities, including the coordination of response partners in the field;
2. Building capacity in countries to rapidly detect and manage suspected and confirmed cases of EVD;
3. Preventing the transmission of EVD in communities;
4. Preventing the transmission of EVD in health care facilities and during the delivery of health care;
5. Supporting patient and community recovery by providing psychosocial first aid and referral as needed;
6. Supporting ethical applied research in the clinical, laboratory, epidemiological, social and ecological determinants of EVD outbreaks.

2. Actions to date

Coordination

- The AFRO Regional Director has written to all Ministers of Health and Heads of WHO Country Offices (HWCOS) in the African Region informing them of the current situation in affected countries and recommending key preparedness actions for all countries in the region.
- Daily conferencing has continued among the MoH/WCO of Guinea, Sierra Leone, Liberia, IST West Africa, WHO HQ and AFRO for risk assessment and operational planning and review.

- Support to the national health authorities of Guinea, Liberia, Mali and Sierra Leone in coordination, resource mobilisation and advocacy.
- Technical cooperation through participation at the special session on EVD held during the 15th ordinary meeting of the assembly of ECOWAS Health Ministers in Monrovia on 8-11 April, 2014.
- Support to cross-border collaboration and information sharing with neighbouring countries at risk.
- Support to the development of EVD prevention and response plans, resource mobilisation and outbreak logistics.
- Technical collaboration with response partners including the member institutions of the Global Outbreak Alert and Response Network (see Table 2), Médecins Sans Frontières (MSF), the European Centers for Disease Control and Prevention (CDC), UNHCR, UNICEF, a number of International and National NGOs.
- WHO's Emerging and Dangerous Pathogens Laboratory Network (EDPLN), is providing diagnostic and reference laboratory support to affected countries. Collaborating laboratories include: Institut Pasteur (IP) Dakar, Senegal; the European Union Mobile Laboratory (EMLab) team (comprising the Centre International de Recherche en Infectiologie (CIRI), France; the Bernhard-Nocht Institute of Tropical Medicine Hamburg, Germany; the National Institute for Infectious Diseases, Rome, Italy); the Centre International de Recherche en Infectiologie (CIRI), Lyon, France, and the Metabiota, Kenema, Sierra Leone.

Technical Expertise

WHO's activities in affected countries include providing support to:

- Actively search for cases, backed up by rapid laboratory confirmation.
- Rapidly identify all contacts of clinical cases of EVD to place them under medical observation for 21 days after the last exposure to a known case.
- Investigate the patterns and risk factors for transmission in the affected communities to guide control measures.
- Deploy and sustain an international outbreak response team from WHO and GOARN in the field (providing expertise in clinical management, infection prevention and control, epidemiology, data management, laboratory diagnostics and reference, social mobilisation and health promotion, psychosocial support, medical anthropology, logistics and communications) to support national health authorities in immediate response activities and field investigation, and in the coordination of international technical support.
- Strengthen infection prevention and control in health facilities. This includes strict adherence with hand washing, the use of personal protective equipment, safe injection practices, environmental disinfection and the safe management of clinical waste.
- Rapidly strengthen health care worker knowledge about Ebola virus disease and infection prevention and control. All health care workers must be familiar with the features of Ebola virus disease so they can rapidly identify potential cases and manage them accordingly. This includes emergency triage systems for proper referral to Isolation Centres.
- Provide comprehensive field logistics support, including transport, communications and coordination with partners. This includes ensuring an uninterrupted access to equipment and supplies to care for patients properly and humanely, including in private care facilities.
- Implement social mobilization and health education programs to address community concerns and to promote the rapid adoption of risk reduction and protective actions. This includes promoting hand washing, caring safely for the sick, safe environmental disinfection and safe burials.
- Ensure safe and culturally-acceptable burials.
- Work with communities to stop stigmatization of affected individuals and families so that people are supported to come forward early if they develop symptoms and are able to return to their communities when they recover.

Activities in unaffected communities and neighbouring countries include providing support to:

- National health authorities in preparedness planning and through the dissemination of best practice guidelines, information and communication materials and prepositioning of essential supplies.
- Prepare health-care workers in to safely and confidently manage cases of suspected Ebola virus disease.

Human resource management

- As of 16 April, WHO in collaboration with the Global Outbreak Alert and Response Network (GOARN) has deployed 82 experts to the field since the beginning of the outbreak in Guinea, Liberia and Sierra Leone, and 25 deployments are in the pipeline. More are planned. Deployments to date include:
 - 52 WHO staff deployed through WHO surge in accordance with the grading of the outbreak in Guinea as a grade 2 emergency under the WHO Emergency Response Framework
 - 22 experts from among GOARN partners
 - 7 directly recruited consultants.
- See Annex for deployments by recruitment status, recruitment mechanism and place of deployment (Table 1), GOARN deployments by partner institution and country (Table 2) and deployments (current and completed) by functional area and place of initial deployment (Table 3).

Logistics and Supplies

- WHO continues to monitor logistics needs in affected and neighbouring countries and has distributed a range of medical supplies, including personal protective equipment (PPE).
- See Tables 4 and 5 for the supplies WHO has dispatched to date.

Finance and administration

- At the beginning of the outbreak, WHO provided initial support of USD 30,000 USD to Guinea, and USD 20,000 each to Liberia and Sierra Leone to initiate response and preparedness. Subsequently preparedness and response plans have been prepared and additional support has been provided in line with the plans.
- The African Public Health Emergency Fund (APHEF) provided USD 140,400 to Guinea and a request from Liberia is currently being processed.
- The total estimated budget for the response including direct country response plan budget for Guinea and Liberia and WHO budget for all levels is USD 18,963,710. Guinea has received pledges or cash of up to USD 8,886,000, while WHO has received pledges or cash of USD 1,761,320 leaving a gap of USD 8,316 390.

Table 4: Financial support for Ebola outbreak response in West Africa, as of 15 April 2014

Budget	Guinea Response Plan	Liberia Response Plan	WHO Support Plan*	TOTAL
Total budget	11,934,000	2,265,000	4,764,710	18,963,710
Total received/ Pledged	8,886,000	-	1,761,320	10,647,320
Funding Gap	3,048,000	2,265,000	3,003,390	8,316,390

* Comprises of HQ, AFRO, IST and WCOs support budgets. Some of the funds received are being used to fund National response plans. No information received yet on funding received/pledged against Liberia's response plan.

Information and Risk communications

- WHO/GOARN teams have provided training in the following areas:
 - To local clinicians, nursing staff, mortuary staff, ambulance drivers and cleaners in infection prevention and control, including the safe handling of the deceased, safe burials and clinical waste management
 - Surveillance and epidemiology teams are providing training in EVD surveillance and contact tracing activities to local public health staff and community volunteers respectively
 - Data management training in the use of Epi-Info Version 7, including data visualisation of transmission trees
 - Knowledge, skills and technology transfer of ebolavirus and other viral haemorrhagic fever PCR assays
- IEC materials adapted/developed and distributed to all countries in the African Region
- Publication of 14 Disease Outbreak News updates on EVD in West Africa since 23 March 2014 posted on the WHO HQ and the AFRO websites as well as through the Event Information Site under the International Health Regulations
- Distribution of the case definitions, revised VHF guidelines e.g. *Clinical Management of Patients with Viral Haemorrhagic Fever: A pocket guide for the front-line health worker*, EVD factsheets, clinical algorithms
- Publication of the following information products:
 - Frequently asked questions on EVD
 - Fact sheet on EVD
 - Essential information on disease, transmission, prevention
 - Advice for travellers
 - Information for travellers on risk, precautions and symptoms
 - Ebola virus disease: background and summary
 - Background information on the disease, current situation and WHO's work
- Information sharing through WHO social media.

3. Summary of public health risks, needs and gaps

The critical needs currently are funding for human resource deployment and medical equipment and supplies for case management and infection prevention and control. Proposed areas for potential additional financial support are as follows:

- Active case finding in communities and health care facilities
- Support contact tracing activities in Guinea and Liberia
- Purchase and dispatch of medical supplies including PPE
- Financial support to WHO for the recruitment of international experts
- Building capacities in clinical case management and infection prevention and control in public health and private health care facilities
- Support to continued social mobilization and risk communication.

EVD Websites and Related Links

- WHO African Regional Office homepage <http://www.afro.who.int/>
- WHO AFRO EPR Outbreak News <http://www.afro.who.int/en/clusters-a-programmes/dpc/epidemic-a-pandemic-alert-and-response/outbreak-news.html>
- WHO homepage www.who.int. There is now a box on the WHO Homepage to direct people easily to the new EVD webpage see: <http://www.who.int/csr/disease/ebola/en/>
- WHO Disease Outbreak News <http://www.who.int/csr/don/en/>
- French Ebola website <http://www.who.int/csr/disease/ebola/fr/>
- FAQ in French <http://www.who.int/csr/disease/ebola/faq-ebola/fr/>

- Ebola haemorrhagic fever fact sheet :
<http://www.who.int/mediacentre/factsheets/fs103/en/index.html>
- Interim Infection Control Recommendations for Care of Patients with Suspected or Confirmed Filovirus (Ebola, Marburg) Haemorrhagic Fever
http://www.who.int/csr/bioriskreduction/filovirus_infection_control/en/index.html
- Outbreak Communication. Best practices for communicating with the public during an outbreak.
http://www.who.int/csr/resources/publications/WHO_CDS_2005_32/en/
- Communication for Behavioural Impact (COMBI): A toolkit for behavioural and social communication in outbreak response
http://www.who.int/ihr/publications/combi_toolkit_outbreaks/en/index.html
- COMBI Toolkit: Field Workbook for COMBI planning steps in outbreak response.
http://www.who.int/ihr/publications/combi_toolkit_fieldwkbk_outbreaks/en/index.htm

Annexes

The numbers in the following tables are all subject to change as WHO and the Global Outbreak Alert and Response Network (GOARN) continue to mobilise human and material resources to respond to this outbreak.

Table 1 Deployments by recruitment status, recruitment mechanism and place of deployment

Deployment type	Conakry Guinea	Guékédou Guinea	Lofa Liberia	Monrovia Liberia	Montserrado Liberia	Freetown Sierra Leone	Grand Total
Externally recruited & deployed	9	1					10
GOARN	21	8	0	2	0	0	31
Deployed	12	8		2			22
In Process	9						9
WHO Surge	40	6	4	10	2	3	65
Deployed	31	6	4	8	2	1	52
In Process	9			2		2	13
Grand Total	70	15	4	12	2	3	106

Table 2 GOARN deployments by partner institution and country

Country and Institution	Deployed	Deployment Finished	In Process	Grand Total
France	3	1	1	5
INSERM, Jean Mérieux BSL4 laboratory	1		1	2
Institut Pasteur Paris	1	1		2
Museum national d'histoire naturelle (MNHN)	1			1
Germany	5		2	7
Bernhard Nocht Institute for Tropical Medicine	2		1	3
BSL4 laboratory, Philipps University Marburg	1			1
German Armed Forces Medical Service, GER Ministry of Defence	2		1	3
Hungary			1	1
European Centre for Disease Control (ECDC)			1	1
Italy	1			1
National Institute for Infectious Diseases Lazzaro Spallanzani (INMI)	1			1
Senegal	2			2
Global Infection Prevention and Control Network	1			1
Institut Pasteur Dakar	1			1
Singapore	2			2
National University Hospital, Singapore	2			2
Spain			1	1
Instituto de Salud Carlos III (ISCIII)			1	1
UK	1			1
Public Health England (PHE)	1			1
USA	6		4	10
Centres for Disease Control and Prevention (CDC)	6		3	9
Tulane School of Public Health and Tropical Medicine			1	1
Unspecified	1		3	4
WHO Clinical Network	1			1
Deployment location to be determined			3	3
Grand Total	21	1	12	34

Table 3 Deployments current and completed by functional area and place of initial deployment

Country of deployment and mission role	External Recruitment	GOARN	WHO Surge	Grand Total
Conakry, Guinea	6	12	31	49
Administration/Resource mobilisation			4	4
Anthropology	1	1		2
Clinical case management		1		1
Consultant	1			1
Coordination			10	10
Data Management/Mapping		1	2	3
IPC/Case management	1		2	3
Laboratory	1	3	3	7
Laboratory (EU mobile lab)		1		1
Logistics	1		2	3
National Professional Officer			2	2
Risk communications/Media		1	4	5
Social Mobilization			2	2
Surveillance/Epidemiology	4	4		8
Guékédou, Guinea	1	8	6	15
Unspecified	1			1
Clinical case management			1	1
IPC/Case management		1		1
Laboratory			1	1
Laboratory (EU mobile lab)		7		7
Logistics			2	2
Surveillance/Epidemiology			2	2
Lofa, Liberia			4	4
Coordination			1	1
Surveillance/Epidemiology			3	3
Monrovia, Liberia		2	8	10
Administration/Resource mobilisation			1	1
Coordination			2	2
Data Management/Mapping			2	2
Infection Prevention and Control		2		2
Social Mobilization			2	2
Surveillance/Epidemiology			1	1
Montserrado, Liberia			2	2
Coordination			1	1
Surveillance/Laboratory			1	1
Freetown, Sierra Leone			1	1
Risk communications/Media			1	1
Grand Total	7	22	52	81

Table 4 Medical supplies dispatched from WHO's Dubai warehouse

PPE type	Receiving Country				Total
	Guinea	Liberia	Sierra Leone	Mali	
PPE module A	57	15	20		92
PPE module B	18	5			23
Biopacks	12				
Body bags	0	0	40		40
Face shields	500	500	500		1500
Surgical mask	170	70	70		310
Respirators N95	2000	2000	2000		6000
Pyjamas, Top and Trousers	500	200	144		844
Coveralls	1500	1500	1500		4500
Gloves	750	300	300		1350
Gowns	5000	2000	2000		9000
Sample Collection Kit			1		1

Table 5 Personal Protective Equipment from IST West

Receiving Country	No. of kit boxes
Guinea Conakry	160
Guinea Bissau	100
Cote d'Ivoire	100
Liberia	100
Mali	100
Senegal	100
Sierra Leone	100
Total	760 (38,000 kits)

*Boxes of 50 kits