

Update on the recent status of Ebola virus disease, West Africa

1 Aug 2014

Background

In the most challenging Ebola outbreak the world has ever faced, the cumulated numbers for affected countries: Guinea, Liberia, Nigeria and Sierra Leone currently stand as follows:

Guinea

- Suspected and confirmed case count: 460
- Suspected case deaths: 339
- Lab confirmed cases: 336

Liberia

- Suspected and confirmed case count: 329
- Suspected case deaths: 156
- Lab confirmed cases: 100

Sierra Leone

- Suspected and confirmed case count: 533
- Suspected case deaths: 233
- Laboratory confirmed cases: 473

Nigeria

- Suspected and confirmed case count: 1
- Suspected case death: 1
- Laboratory confirmed case: 0

As of 27 July 2014, cumulative number of cases: 1323, total deaths: 729¹

Epidemiology and Surveillance (as per Disease Outbreak news update 31 July 2014)

- The Ebola epidemic **trend remains precarious** with ongoing community and health-facility transmissions of infection.
- **Between 24 and 27 July 2014**, a total of **122 new cases of Ebola virus disease** as well as 57 deaths were reported from Guinea, Liberia and Sierra Leone. The surge calls for

¹ The total number of cases is subject to change due to reclassification, retrospective investigation, and consolidation of cases, laboratory data and enhanced surveillance. Data reported in the Disease Outbreak News are based on best available information reported by Ministries of Health.

concentrated efforts by all to address health facility transmission and effective contact tracing.

- On 29 July 2014, the IHR-NFP for Nigeria confirmed that **probable EVD case notified to WHO on 27 July was symptomatic at the time of arrival in Nigeria** and that 59 contacts (15 from among the airport staff and 44 from the hospital staff) have been identified so far. The report also confirmed that the patient travelled by air and arrived in Lagos, Nigeria on 20 July via Lome', Togo and Accra, Ghana. The sample from this case is yet to be sent to the WHO CC at Institute of Pasteur in Dakar, Senegal, due to refusal of courier companies to transport the sample.

Details of Nigeria Case:

- Though only one probable case has been detected so far in Nigeria, Ebola virus infection in this country represents a **significant development** in the course of this outbreak.
- Lagos is a densely populated city with population over 20 million and therefore if further spread of this disease occurs, it has the potential to put a large population at risk and pose a major challenge to the health system.
- Given the history of travel of the case from Liberia to Nigeria with a stopover in Accra, Ghana and a change of aircraft in Lome, Togo, there is a possibility of international spread.
- There is currently no evidence that this outbreak has, or will have, international travel or trade implications. The Nigerian CDC and Federal Ministry of Health have commenced investigation of the outbreak, along with registration of contacts and relevant follow up (59 contacts so far). The precise number of passenger contacts is being ascertained.
- History
 - A 40 year old Liberian male arrived in Lagos airport from Monrovia via Lome on Asky Airline flight. His plane was reported to have a brief stop at Accra and Lome, and the aircraft was changed at Lome.
 - He was reported to have fallen ill on board and remained very ill on arrival at the airport in Lagos. He was assisted by various airport and protocol staff at a private hospital, where an initial diagnosis of suspected VHF was made.
 - Laboratory investigation at the World Bank funded African Centre of excellence for genomics of infectious disease (ACEGID) Redeemers university detected viral DNA and in both patient blood and urine samples. Samples were also collected for further confirmation at WHO CC laboratory for Ebola at Dakar; however shipment of samples were declined by a courier company on disclosure of the content of the package.
 - Preliminary investigations have revealed that the patient was aware that he was ill at the time he departed from Monrovia for Lagos; that the patient had lost a sister who was confirmed to have Ebola on 16 July 2014 in Monrovia.
 - The high index of suspicion of medical staff at the private hospital helped to detect the case early and they took prompt action in isolating the patient and notifying the

relevant health authorities for assistance. However, a few staff especially the cleaning staff may not have taken full precautions. Also, during preliminary laboratory investigation, samples were sent to Clina-Labs, a private laboratory at Id-araba Lagos for Urea and electrolytes test. The laboratory personnel who came in contact with the samples have been registered and are being followed up.

- While a number of activities are being carried out in Lagos, Nigeria: outbreak investigation, contact tracing, active surveillance, RRT orientation, case management/IPC, health education and communication and community involvement is being done...there are challenges of limited IPC supplies, limited knowledge of health staff on Ebola, lack of lab supplies, inadequate public awareness and inadequate transport logistics for contact tracing.

Risk Assessment of EVD/Nigeria

- Serious Public Health Impact

Yes. Though only one probable case has been detected so far, EVD represents a significant public health risk.



Unusual or unexpected

Yes. The occurrence of an Ebola outbreak in Nigeria is unusual and unexpected since this is the first case in the country.

- International disease spread

Yes. Given the history of travel of the case from Liberia to Nigeria with a stopover in Accra, Ghana and a change of aircraft in Lome, Togo, there is a possibility of international spread.

- Interference with international travel or trade

No. There is currently no evidence that this outbreak has, or will have, international travel or trade implications.

Overall ongoing response operations

In an effort to accelerate the response to the current EVD outbreak in West Africa, the Director General of WHO and other senior managers continue to hold discussions with the donor community, development partners, and international agencies at a global level. Focus of the discussion has centered on the need to rapidly deploy additional human and financial resources that will help interrupt Ebola transmission and end the outbreak.

The Director-General of WHO and presidents of west African nations impacted by the Ebola virus disease outbreak will meet in Guinea to launch a new joint US\$ 100 million response plan as part of an intensified international, regional and national campaign to bring the outbreak under control.

Efforts are currently ongoing to scale up and strengthen all aspects of the response in the four countries, including epidemiologic investigations, contact tracing, public information and community mobilization, case management and infection prevention and control, coordination, and staff security. WHO is also working closely with various partners to finalize the national response plans that define urgent response needs in line with the Accra strategy adopted by Member States.

In response to continuing reports of new cases and deaths attributable to EVD in Guinea, Liberia and Sierra Leone, the WHO Regional Director for Africa, has opened a Sub-regional Outbreak coordination center in Conakry, Guinea. WHO and its partners – GOARN, CDC, MSF, UNICEF, IFRC, Institute Pasteur of Dakar, Save the Children, Plan Guinea, and others – continue to work together through the Sub-regional Ebola Outbreak Coordination Center (SEOCC) in Conakry to accelerate the control of this outbreak.

WHO does not recommend any travel or trade restrictions is applied to Guinea, Liberia, Nigeria, or Sierra Leone based on the current information available for this event.

Ebola Virus Disease -Travel and Transport Update

Summary-Facts

- **Transmission:** Incubation period varies from 2-21 days. There is no risk of transmission during the incubation period, and only low risk of transmission in the early phase of symptomatic patients. **Person-to-person transmission by means of direct contact with infected persons or their body fluids/secretions is considered the principal mode of transmission.** In a household study, secondary transmission took place only if direct physical contact occurred. No transmission was reported without this direct contact. Airborne transmission has not been documented during previous EVD outbreaks. People are infectious as long as their blood and secretions contain the virus. Men who have recovered from the disease can still transmit the virus through their semen for up to seven weeks after recovery from illness.
- **Travelers:** The risk of infection for travelers is very low unless the traveler has direct physical contact with a sick or a dead person or animal infected with Ebola virus. Most human infections have resulted from direct contact with the body fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated body fluids. Travelers should avoid all contact with infected patients.
- **Health care workers:** There is a risk for HCWs and volunteers, especially if involved in caring for EVD patients. Those who are providing medical care or are involved in the evaluation of an outbreak should wear protective clothing, including masks, gloves, gowns, eye protection and practice proper infection control and sterilization measures.
- Burial ceremonies in which mourners have direct contact with the body of the deceased person can also play a role in the transmission of Ebola. Anyone who stayed in the areas

where EVD cases have been recently reported should be aware of the symptoms of infection and advised to seek medical attention at the first sign of illness.

Recommendations from WHO

WHO does not recommend that any travel or trade restrictions be applied in respect to this event.

- There is a possibility that a person who had been exposed to Ebola virus and developed symptoms may board a commercial flight, or other mode of transport, without informing the transport company of his status. It is highly likely that such patients would seek immediate medical attention upon arrival, especially if well informed, and then should be isolated to prevent further transmission. Although the risk to fellow travelers in such a situation is very low, contact tracing is recommended in such circumstances.
- Countries are recommended to raise the level of awareness and knowledge of travelers leaving for or arriving in an area where EVD is occurring. These travelers should be provided at the points of entry (airports/ports/ground crossings) with information on the potential risk of EVD. (Please see template message as available at WHO website).

The information provided should emphasize that travelers or residents in affected areas of countries can minimize any risk of getting infected if they avoid:

- Contact with blood/body fluids of a person or corpse infected with the Ebola virus.
- Contact with or handling wild animals, alive or dead or their raw or undercooked meat
- Having sexual intercourse with a sick person or a person recovering from EVD for at least 7 weeks.
- Having contact with any object, such as needles that has been contaminated with blood/body fluids.

Travelers should be informed where to obtain medical assistance at the destination and who to inform (hotline numbers).

Returning visitors from affected areas should be alerted that if they develop infectious disease symptoms (such as fever, weakness, muscle pain, headache, sore throat, vomiting, diarrhea, rash or bleeding) within 3 weeks after return or if they suspect if they have been exposed to Ebola virus(eg. Volunteers who worked in health care settings)in the affected areas, they should seek rapid medical attention and mention their recent travel to the attending physician.

- Countries are also recommended to raise the awareness and knowledge of health care providers. Health care providers managing returning travelers need to question them on travel history and consider the possibility of EVD in person coming back from affected areas. A person suspected of having been exposed to Ebola virus should be evaluated regarding

the risk of exposure. If the risk of exposure is very low, the person should be reassured, asked to self-monitor for 21 days and seek immediate care if developing symptoms.

1. Public Health authorities need to:

- Sensitize staff working at “points of entry”, in healthcare settings or involved in first response (emergency departments, ambulance services, GP offices, fire department, civil defense, airport operators, aircraft operators, port health authority) for early and advanced symptoms of viral hemorrhagic fever.
- Emphasize systematic recording in health clinics of travel history of those with relevant symptoms.
- Establish a standard diagnostic procedure for EVD and for common differential diagnoses at an early stage (e.g. malaria, dengue, typhoid fever, shigellosis, cholera, leptospirosis, plague, rickettsiosis, relapsing fever, meningitis, hepatitis, yellow fever and other viral hemorrhagic fevers).
- Establish a protocol for notification to the competent public health authorities at an early stage if an EVD case is suspected.
- Identify and establish laboratory procedures and operational channels to perform Ebola virus diagnostic testing in the country or refer to the closest WHO Collaborating Centre or reference laboratories able to perform viral hemorrhagic fever diagnostics if cases are suspected.
- Ensure basic training of health care workers on principles of provisional barrier and use of personal protective equipment.
- Emphasize to personnel working in the travel sector the importance of infection control methods.
- Keep the regulatory authorities (e.g. national civil aviation authority) informed and involved in decision-making.
- Screening passengers at points of entry (ports , airports or ground crossing) is not recommended,

- Travel restrictions, closure of borders at points of entry are not recommended.

Recommendations for international air Transport

In case of a passenger presenting with symptoms compatible with EVD on board of an aircraft, measures should be immediately considered, in accordance with IATA guidelines: distancing of other passengers, covering nose and mouth of patient with a surgical facemask, limiting contacts to the passenger to the minimum, hand washing with soap after any contact (direct/indirect), immediate notification of authorities at destination airport, immediate isolation on arrival.

Dedicated crew member to assist the ill traveler should be using suitable PPE for dealing with the traveler and for cleaning procedures on board.

Epidemiological measures based upon the proximity to index patient should be considered:

- Passengers and crew with reported direct contact
- Passengers seated in an adjacent seat to the index patient
- Cleaning staff of affected aircraft section.

Countries may consider requiring aircraft general declaration (in those cases where information is not communicated to the airport of arrival on flight) concerning persons on board with communicable diseases or sources of infection.

Key Facts

Ebola virus disease (formerly known as Ebola haemorrhagic fever) is a severe, often fatal illness, with a case fatality rate of up to 90%. It is one of the world's most virulent diseases. The infection is transmitted by direct contact with the blood, body fluids and tissues of infected animals or people. Severely ill patients require intensive supportive care. During an outbreak, those at higher risk of infection are health workers, family members and others in close contact with sick people and deceased patients. Ebola virus disease outbreaks can devastate families and communities, but the infection can be controlled through the use of recommended protective measures in clinics and hospitals, at community gatherings, or at home.

Related links

Disease Outbreak Update-Ebola

<http://www.who.int/csr/disease/ebola/en/>

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 Filo virus (Ebola, Marburg) Hemorrhagic Fever:

http://www.who.int/csr/bioriskreduction/filovirus_infection_control/en/index.html

FAQs-Ebola virus

<http://www.who.int/csr/disease/ebola/faq-ebola/en/>