

### West Africa 2014 Ebola Epidemic

Dear Colleagues, we wished to present you a facts sheet about the Ebola virus that has a potential to pose a threat for our country and cause an epidemic in West Africa prepared by the scientific commission of Ministry of Health of which we are a part. Furthermore, if we need to summarize the current situation briefly;

The Ebola Epidemic in West Africa has been both the biggest epidemic ever in history as of September 2014 and is first epidemic encountered in the West African

region. As far as the latest information is concerned, Ebola cases have been found in the region in such countries as Guinea, Liberia, Nigeria, Senegal, and Sierra Leone (Figure and Table 1). Although some cases were reported in Congo, they do not seem to be connected with the West Africa Epidemic. Although we have no reported cases in Turkey as of now, the fact that there are both direct flights both from Turkey to the countries in the region and many Turkish people are in the region due the close commercial relationships, it is possible to say that there is a risk.



**Figure 1.** The countries affected by the 2014 West Africa Ebola Epidemic and the affected region of these countries as of 15<sup>th</sup> of September, 2014 (Source; Centers for Disease Control and Prevention of USA - CDC, <http://www.cdc.gov/vhf/ebola/resources/distribution-map-guinea-outbreak.html> access 15 September 2014)

**Table 1.** 2014 West Africa Ebola Epidemic, the Ebola affected regions as of 15<sup>th</sup> of September 2014

Countries	Affected Region
Guinea	Conakry, Coyah, Forecariah, Gueckedou, Kouroussa, Macenta, Siguiiri, Pita, Nzerekore, Dubreka, Yomou, Kerouane Regions with no activity leftas of September: Boffa, Dabola, Dinguiraya, Kissidougou, Telimele
Liberia	Lofa, Montserrado, Margibi, Bomi, Bong, Grand Cape Mount, Nimba, Grand Bassa, Grand Gedeh, RiverCess, River Gee, Sinoe, Gbarpolu
Nigeria	Port Harcourt, Lagos
Sierra Leone	Kailahun, Kenema, Kono, Kambia, Bombali, Tonkolili, Port Loko, Pujehun, Bo, Moyamba, Bonthe, Western area
Region where travel-related cases were encountered	Affected region
Senegal	Dakar

Five varieties of viruses are classified under the type of Ebolavirus. Of those viruses, *Zaire ebolavirus*, *Sudan ebolavirus*, *Tai Forest ebolavirus* and *Bundibugyo ebolavirus* are known to cause diseases in humans. Reston ebolavirus, on the other hand, causes diseases in primates; as it is isolated in humans without any symptoms, it should be noted that it may proceed asymptotically in humans. Zaire type Ebola virus is responsible for the 2014 West Africa Ebola virus.

In its classical definition, the Malburg virus types in which they are included despite its bleeding fever table like the other family members of Filoviridge family of Mononegavirales group, since typical bleeding symptoms are common in less than half of the cases in the 2014 West Africa Ebola virus, the clinical picture in this epidemic has been termed as Ebola disease.

While the cases encountered until now are the cases progressing in the form of Ebola haemorrhagic fever picture in which there are sporadic cases where infected animals have usually passed the virus onto humans, in almost all the cases in this epidemic, the infection has been passes on from human to human. The incubation period following the virus intake varies between 2 to 21 days and the average period in this epidemic turned out to be 8-10 days. In this Ebola virus disease whose mortality was defined as high as 90%. It was detected that survival rate in this epidemic was 47%; in other words, survival rate seems to be higher.

Even though it is currently not an efficient treatment,

the experimental treatment efforts have been continuing in the region viaa monoclonal antibody termed as Zmapp developed in the United States of America and whose phase 2 studies were performed before the epidemic. Furthermore, first experimental Ebola virus vaccine was administered for the first time to a 39-year old woman on the 4<sup>th</sup> of September 2014 in the United States of America. This experimental vaccine whose safety experiments are still underway has been developed by Glaxo-SmithKline and the United States Health Institute and Allergy-Infectious Diseases Institute. This vaccine whose phase one experiments with primates are positive are planned to be implemented with 20 male and female volunteers.

Wishing not to have any Ebola cases in our country,

#### Ateş Kara, MD

Department of Infectious Diseases, Division of Pediatric Diseases, Hacettepe University Faculty of Medicine, Ankara, Turkey  
Phone: +90 312 311 49 63  
E-mail: ateskara@hacettepe.edu.tr  
DOI:10.5152/ced.2014.9999



#### References

1. T.C. Sağlık Bakanlığı. Ebola Virus Hastalığı Vaka Yönetimi (Bilim Kurulu Çalışması) 2014. (T.R. Ministry of Health. Ebola Virus Disease Case Management [Scientific Committee Workshop, 2014])