
Ebola Preparedness and Risk in Latin America

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Abstract

Until today, February 22, 2016, no confirmed Ebola cases have been diagnosed in Americas (except USA, four cases with one death). Confusion, lack of knowledge, and fear have led to quickly misclassify cases as suspected, when in fact most of them are false alarms. Nevertheless, European governments summoned to mobilize resources to attend the Ebola outbreak in West Africa. And also Latin American governments should contribute to halt this humanitarian crisis and to be prepared for the potential arrival of this deadly virus in the Caribbean, Central, and South American mainland. In this chapter, we described the experience of preparedness as well as risk assessment done in Latin America regarding the threat of Ebola for the region.

Keywords: Ebola, preparedness, risk assessment, travel medicine, Latin America

1. Introduction

Ebola virus (EBOV) was the second genus of the Filoviridae family to be discovered. This negative-sense, single-stranded RNA virus was first identified in 1976 following two simultaneous outbreaks in Zaïre (now known as the Democratic Republic of Congo) and Sudan [1–4]. Since then, at least 25 subsequent outbreaks, including the ongoing outbreak in West Africa, have occurred and various EBOV species have been identified with genetic and virulence variability and still unknown pathogenesis. Before 2014, none of those epidemics implied imported cases outside Africa, with its multiple implications [1–9].

Nowadays, the ongoing outbreak (almost finished) in West Africa has been the largest reported in history, and from a global health perspective, it showed again how poverty, cultural practices, and weak and unprepared health systems could interact exacerbating infectious disease spread, limiting its control and mitigation, and the importance of travel in a globalized world, since this was the first outbreak in which EBOV cases and transmission were reported outside of Africa [5, 6, 8].

This outbreak has challenged global capability of response of world policymakers to organize and implement resources in an impoverished and previous overlooked area, it taught the implication of reactive rather than proactive health systems organization, and in a setting of unpreparedness and lack of knowledge, social media played an important role in spreading unfounded fear through false alarms [5, 6, 8].

Until today, February 14, 2016, a total of 28,639 cases and 11,316 deaths (case fatality rate [CFR %] of 39.5%) were reported according to the World Health Organization (WHO) report of February 17, 2016 [10]. The majority of these cases and deaths occurred between August and December 2014, after which case incidence declined apparently associated with scale-up of treatment, isolation, and safe burial.

In the last 21 days, zero cases were reported in the implicated countries (Guinea, Liberia, and Sierra Leone) and on November 7, 2015, December 29, 2015, and January 14, 2016, the WHO declared that human-to-human transmission of Ebola virus has ended in Guinea, Sierra Leone, and Liberia, respectively, if no further cases appear, entering in a period of heightened surveillance, putting these countries in the way on recovery, and giving the chance of getting essential health services backup and to address weaknesses to rebuild a resilient health system [10].

Likewise, there were a total of seven cases reported outside of African continent with one death at USA [10]. Countries involving imported cases outside Africa have been Italy, Spain, United Kingdom, and USA (each one with one case, except USA with four cases) [11] (**Figure 1**), without truly suspected cases in Latin America and the Caribbean (LAC) [6–13].

Nevertheless, European governments summoned to mobilize resources to attend the Ebola outbreak in West Africa during the peak of the epidemics [14–16]. But also LAC governments have been called to contribute to halt this humanitarian crisis and to be prepared for the potential arrival of this deadly virus in the Caribbean, Central, and South American mainland,

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