

EBOLA STRATEGY

Ebola and Marburg virus disease epidemics: preparedness, alert, control and evaluation

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List of abbreviations and acronyms

AFRO WHO Regional Office for Africa

COMBI Communication for Behavioural Impact

DRC Democratic Republic of Congo

EMRO WHO Regional Office for the Eastern Mediterranean

EURO WHO Regional Office for Europe

EVD Ebola virus disease

IHR International Health Regulations

MVD Marburg virus disease

NFP National Focal Point

NSAID non-steroidal anti-inflammatory drug

OIE World Organisation for Animal Health / Organisation mondiale de la santé animale

PPE personal protective equipment

PRRS porcine reproductive and respiratory syndrome

VHF viral haemorrhagic fever

WHO World Health Organization

Chapter 1 – Introduction

1. Introduction

1.1 Purpose of the document and target audience

Ebola or Marburg haemorrhagic fever outbreaks constitute a major public health issue in Sub-Saharan Africa. Of the 2 870 Marburg and Ebola cases documented between June 1967 and June 2011, 270 (9%) were health-care workers. In order to provide health-care workers in risk areas with a working tool to combat Ebola Virus Disease (EVD) or Marburg Virus Disease (MVD) effectively, the WHO Regional Office for Africa (AFRO), the WHO Regional Office for the Eastern Mediterranean (EMRO), WHO Headquarters and their partners have produced this document: Ebola and Marburg virus disease epidemics: Preparedness, alert, control and evaluation.

The main target audience of this document are district-level health-care workers (doctors, nurses, and paramedics), as well as intermediate- and central-level health-care workers responsible for epidemic control, and International Health Regulations (IHR) National Focal Points (NFPs).

The objective of this document is to describe preparedness, prevention, and control measures that have been implemented successfully during previous epidemics. These measures must be implemented during the following four phases:

- (1) Pre-epidemic preparedness
- (2) Alert (identify, investigate, evaluate risks)
- (3) Outbreak response and containment operations
- (4) Post-epidemic evaluation.

1.2 Background

The Marburg virus and Ebola virus genera belong to the Filoviridae family (filovirus). The Ebola virus is comprised of five distinct species: Bundibugyo, Côte d'Ivoire, Reston, Sudan, and Zaïre. There is only one Marburg virus species. The Marburg virus and Ebola Zaïre, Sudan, and Bundibugyo subtypes have been associated with large viral haemorrhagic fever (VHF) outbreaks characterized by high person-to-person transmission and a case fatality rate ranging from 25%–90%, whereas Côte d'Ivoire and Reston subspecies have not been associated with VHF outbreaks in humans to date.

Since its discovery in 1976, EVD has mostly occurred in Sub-Saharan Africa (Annex 1). The first cases of EVD were detected in the Democratic Republic of Congo (DRC) and Sudan (1976) and EVD epidemics have since occurred in DRC (1977, 1995, 2007, 2008, 2012), Sudan (1979, 2004), Gabon (1994, 1996, 2001, 2002), Uganda (2000, 2007, 2011, 2012), Republic of the Congo (2001, 2002, 2003, 2005), Guinea (2014), Liberia (2014), Sierra Leone (2014) and Nigeria (2014, following the entry of infected traveller from Liberia) (Figure 1). In 1994, Côte d'Ivoire reported one case of Ebola Côte d'Ivoire in a laboratory

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