



## ECDC TECHNICAL REPORT

# Options for preparing for gatherings in the EU in the context of the current outbreak of EVD in West Africa

29 October 2014

### Scope and purpose of this document

To outline preparedness options with respect to gatherings with participants that have had possible exposure to Ebola virus.

### Target audience

Organisers of international meetings.

### Background

The risk of Ebola virus transmission for a person attending a gathering is dependent on two factors: i) the likelihood of an individual with Ebola virus infection attending the gathering; and ii) the likelihood that there will be exposure allowing transmission, either directly from the infected individual or from their bodily fluids while they are symptomatic, during the gathering.

### Likelihood of an Ebola virus disease case attending the gathering

The epidemic of Ebola virus disease (EVD) is evolving with over 10 000 cases and more than 4 000 deaths reported from West Africa as of 25 October 2014 [1]. The risk of importation to the EU is linked to the magnitude of the outbreak in West Africa. The number of new cases will continue to rise in affected countries in West Africa in the coming weeks and possibly months [2]. Furthermore, an increasing number of healthcare workers are being deployed in affected countries. Therefore, the likelihood of individuals arriving in the EU with potential Ebola virus infection is increasing. More information on EVD and the EVD outbreak can be found on the [ECDC website](#).

On 8 August 2014, WHO declared the EVD outbreak in West Africa a Public Health Emergency of International Concern (PHEIC) in accordance with the International Health Regulations. As a consequence, affected countries are requested to conduct exit screening of all persons at international airports, seaports and major land crossings for unexplained febrile illness consistent with potential Ebola infection. Any person with unexplained febrile illness consistent with potential Ebola infection should not be allowed to travel unless the travel is part of an appropriate medical evacuation. WHO also advise that there should be no international travel of confirmed Ebola cases or

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contacts of cases (except for healthcare workers who have used appropriate personal protective equipment (PPE)), unless the travel is part of an appropriate medical evacuation [3]. WHO does not support the exclusion of individuals without symptoms from international meetings [4]. While these precautions should reduce the probability of EVD cases occurring at international meetings, there remains the potential for false-negative screening results and for incubating cases to travel before the development of fever or other signs of infection [5].

In the unlikely situation that an individual travels during the incubation period and develops EVD during the gathering, or travels with unrecognised symptomatic infection, the risk that this case would infect other participants would be very low overall, but depends on the likelihood of contact occurring that would allow transmission.

## Type of contact allowing transmission

No transmission has been reported without direct contact with a symptomatic case (so-called person-to-person transmission), and previous studies have shown that casual contact with a feverish, ambulant, self-caring patient (sharing a seating area, receptionist tasks, etc.) is regarded as low risk (Table 1) [6,7]. A person who is infected is only able to spread the virus to others after the appearance of symptoms. A low risk of transmission in the early phase of symptomatic patients has been documented [6,8]. Still, Ebola viruses are highly transmissible by direct contact with infected blood or other bodily fluids of infected persons [9], and so the risk of transmission increases as symptoms and signs become more severe. Airborne transmission has not been documented [6,10].

**Table 1. Levels of risk of transmission of Ebola viruses according to type of contact and/or presentation of illness [6]**

Type of contact	Type of contact
Low risk	<ul style="list-style-type: none"> <li>Casual contact with a feverish but ambulant and self-caring patient, e.g. sharing a seating area or public transportation; receptionist tasks.</li> </ul>
High risk	<ul style="list-style-type: none"> <li>Close face-to-face contact (e.g. within one metre) without appropriate personal protective equipment (including eye protection) with a probable or confirmed case who is coughing, vomiting, bleeding, or who has diarrhoea; or has had unprotected sexual contact with a case up to three months after recovery.</li> <li>Direct contact with any material soiled by bodily fluids from a probable or confirmed case.</li> <li>Percutaneous injury (e.g. with needle) or mucosal exposure to bodily fluids, tissues or laboratory specimens of a probable or confirmed case.</li> <li>Participation in funeral rites with direct exposure to human remains in or from an affected area without appropriate personal protective equipment.</li> <li>Direct contact with bushmeat or bats, rodents, primates, living or dead in or from affected areas.</li> </ul>

## Measures to be considered by organisers

Possible measures to be considered by organisers preparing for gatherings in the EU with participants that have had possible exposure to Ebola virus include the following.

### Perform a risk assessment, taking into account:

- factors affecting the likelihood that participants could include an EVD case (e.g. number of participants coming from an affected country [11] within the last 21 days, profession at risk)
- factors affecting the likelihood that transmission from an infected case could occur during the gathering, e.g. length of gathering, nature of contact during gathering.

### Liaise with public health authorities and collect updated information about EVD reporting and control measures (current situation, supporting documents)

- Contact local public health authorities to alert them about the gathering
- Liaise with local/national public health authorities to get familiar with local/national guidelines and on procedures in place for case investigation (if EVD illness is suspected) and case management.

## **Provide information to participants before they travel to the gathering in the EU**

- Prepare general information to all participants about the extremely low level of risk with regards to EVD infection
- Provide information to participants from affected areas/countries about:
  - the clinical presentation of the disease and risk exposure
  - the need to indicate their travel history when seeking medical care after arrival in the EU as well as the possible contact(s) with sick individuals or wild animals
  - the requirement that people who have been exposed (except for healthcare workers using appropriate PPE) should not travel on commercial airplanes within 21 days of their exposure (for more information, please refer to WHO statement on the Meeting of the International Health Regulations Emergency Committee regarding the 2014 Ebola outbreak in West Africa [3]).

## **Prepare to facilitate management of people developing EVD symptoms during the gathering event**

- Identify an area at the venue that is suitable for first isolation in order to prevent others from being in direct contact with a suspected case under investigation, especially if presenting with diarrhoea, vomiting, coughing and/or bleeding
- Establish prior contact with the physicians/infectious disease specialists in the relevant health services and agree arrangements for transporting and handling of suspected EVD cases (according to the preparedness plan of the public health authority)
- Promote good hand hygiene practices during the event
- Ensure that routine infection control precautions/standard precautions are in place when providing care to an ill participant:
  - Provide protective equipment for blood-borne pathogens (e.g. impermeable disposable gloves for direct contact with blood or other bodily fluids)
  - Inform/train respective first aid and healthcare staff
  - Ensure arrangements are in place for safe waste disposal and cleaning of surfaces.

## **Provide information to participants during the gathering**

- Provide general information to all participants about the extremely low level of risk with regards to EVD infection
- Provide a telephone number for participants to call in case any symptoms develop.

## **If a suspected case of EVD occurs during the gathering**

- Inform the relevant public health authority
- Inform the authority/service identified for the transportation and handling of suspected EVD cases
- Support health authorities in collecting relevant information for further potential contact tracing.

## **Further guidance**

WHO has also issued guidance on this subject:

World Health Organization. WHO Interim guidance for international meetings attended by individuals from Ebola virus affected countries [Internet]. Geneva: WHO; 2014 Oct 3. Available from: [http://apps.who.int/iris/bitstream/10665/135751/1/WHO\\_EVD\\_GUIDANCE\\_MG\\_14.1\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/135751/1/WHO_EVD_GUIDANCE_MG_14.1_eng.pdf).

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