

# Preparedness is crucial for safe care of Ebola patients and to prevent onward transmission in Europe – outbreak control measures are needed at its roots in West Africa

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Recent events related to the current outbreak of Ebola virus disease (EVD) in West Africa seemingly indicate inevitable problems that Europe has to face: an individual became symptomatic from Ebola virus disease only after having arrived in a non-affected country [1], and healthcare workers became infected with Ebola while caring for patients, either in West Africa or in non-affected countries where they had been medically evacuated [2–4]. Moreover, media enquiries and reports reveal concern among the general public.

All this follows the dramatic development of the epidemic in West Africa over the past months, and forecasts unanimously agree that it will take weeks if not months before the trend in the affected region can be inverted and the epidemic be controlled [5–6]. Therefore, European countries will have to cope with more cases arriving from affected areas while being well prepared to prevent secondary transmission.

While infections in the dedicated healthcare settings in Europe will probably remain single and unfortunate events, they need to be investigated thoroughly in order to incorporate the lessons learnt from them into improved standards and procedures as well as consider them in training activities.

There are three possible scenarios that may result in patients infected with Ebolavirus to present in healthcare settings in Europe and healthcare workers or support staff coming into contact with them.

The first scenario is related to a patient in an affected country with a confirmed Ebolavirus infection who is medically evacuated to Europe. This scenario should not result in further transmission in Europe and thus constitute a rather low risk as preparations are possible for such planned situations. However, as pointed out above, and whenever humans are involved, occasions may occur where unfortunate events may lead to infection of a healthcare worker contact. While caring

for Ebola patients in European settings should remain safe when appropriate procedures are in place, a 100 per cent elimination of risks can never be expected.

The second scenario refers to a symptomatic patient boarding a commercial flight, possibly to seek medical care in Europe. Upon declaring the Ebola outbreak in West Africa a public health event of international concern, the World Health Organization (WHO) International Health Regulations Emergency Committee also recommended exit screening in the affected countries [7]. To render this seemingly easy and not too cost intensive measure effective, it needs to be applied systematically to all travellers departing from affected countries. Where this is the case, the risk of exportation can be minimised to a great extent. The support provided by the United States in the affected countries should have helped in the current situation in this respect [8]. Additional screening at the point of entry (entry screening) may complement exit screening, as it may detect the few symptomatic cases that could have been missed by the exit screening or those who may have become symptomatic during the flight. However, entry screening is complex to implement because of the indirect routes that may be taken by travellers.

The third scenario consists of a person travelling to Europe from an affected country while incubating the virus and developing symptoms only after arrival, as experienced recently in Dallas, United States [1]. This situation constitutes the greatest risk to Europe and predisposes to limited secondary transmission to close contacts at the early stage of the disease, when the patient becomes infectious and before being isolated. Efforts are made by all countries in the European Union to minimise this risk through a set of measures namely (i) to provide information about the disease and advice in case of symptoms to all travellers coming from affected areas, (ii) to sensitise front-line healthcare providers about possible EVD symptoms and the need to enquire about recent travel to the affected region

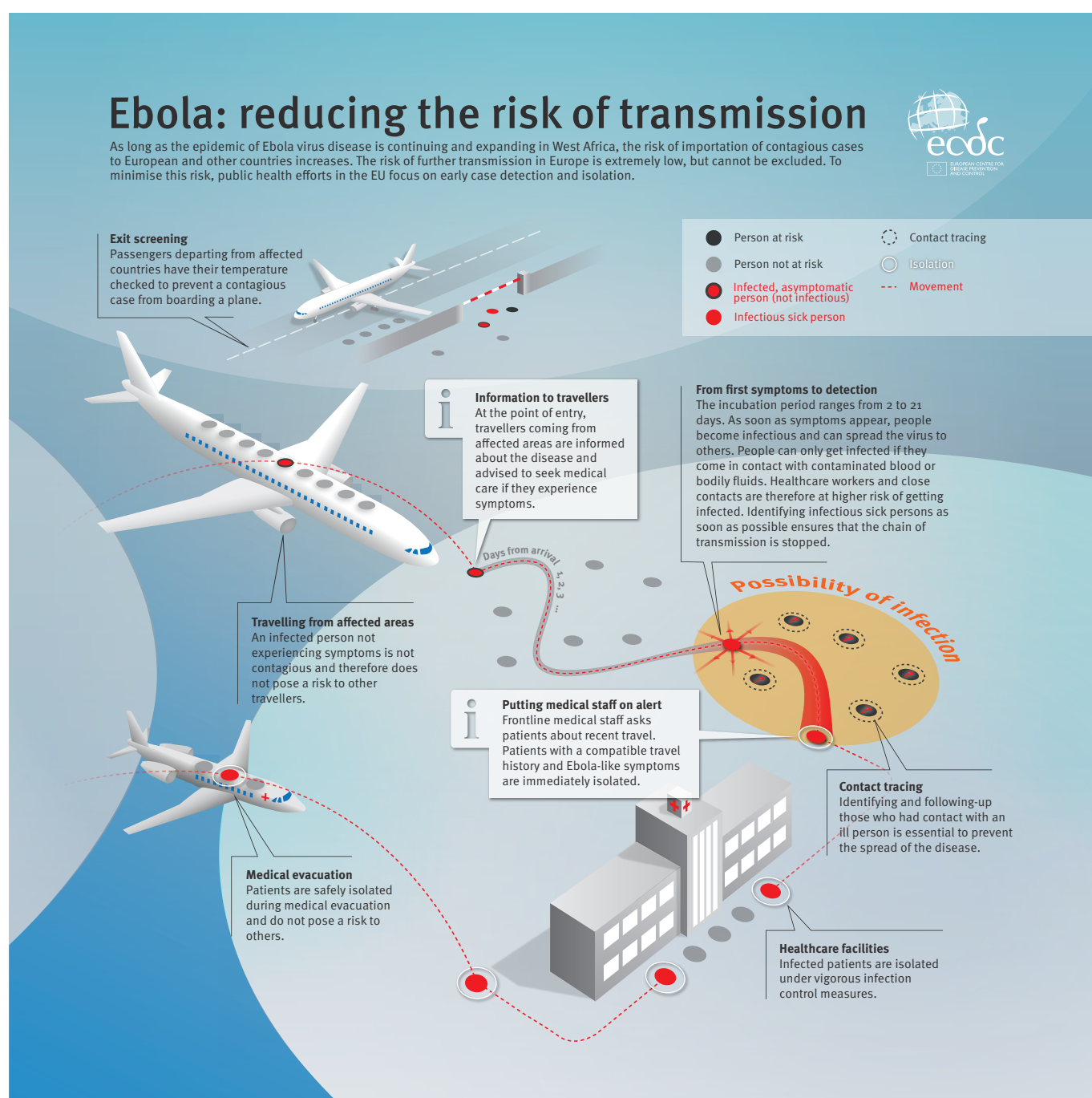
while ascertaining patients, and to ensure their timely isolation when EVD is considered, and (iii) to provide guidance for investigating cases and for infection control measures that should allow to care safely for such patients.

The infographic presents in a simplified way three scenarios described above (Figure).

Medical evacuations to Europe remain particularly safe when infection control measures are applied by experienced, well trained professionals. Despite the envisaged increase in such evacuations that will eventually result in treatment of Ebola cases in European hospitals, transmission to healthcare personnel should

remain the unfortunate sporadic exception. More cases as seen in Dallas will be seen in Europe. Any such situation could happen as well in other regions of the world.

Above all, however, the cases of recently evacuated infected healthcare workers to Europe who were involved in responding to the outbreak in affected countries, should remind us about the important work of those who work in West Africa where the burden of EVD weighs heavily on the population and has affected local healthcare structures and other services considerably. The risk of further spread associated with the ongoing Ebola outbreak in West Africa can only be mitigated by controlling the epidemic at its roots in the affected countries.



We are in tune with voices raising concern about the current situation and calling for strong leadership within the international community to ensure that adequate measures are implemented in this critical situation [9]. The European Centre for Disease Prevention and Control (ECDC) strongly supports respective initiatives from WHO as far as possible within its mandate. As pointed out in the Lancet [9], currently, the international community needs to further strengthen its support to affected countries. While it is still unclear when the outbreak will end, it will be important to analyse this event carefully and learn from it in order to be better prepared for similar events in the future. This we owe to those who suffer and who lost their lives as well as those who are working to save lives and trying to contain this unprecedented Ebola outbreak in the affected countries.

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