

Information briefing

Report From: Director of Public Health,
Consultant in Public Health England

Report To: All healthcare professionals/ frontline workers within Birmingham City Council

Date: 29th January 2015

Title: Ebola Update to the previous briefing issued (14th November 2014).

Introduction

Ebola virus disease (EVD), a viral haemorrhagic fever (VHF), is a rare but severe infection caused by Ebola virus, which is classified as a Hazard Group 4 pathogen. Since March 2014, there has been a large outbreak of Ebola virus in West Africa, with widespread and intense transmission in Guinea, Liberia and Sierra Leone. This is the largest ever known outbreak of this disease prompting the World Health Organization (WHO) to declare a Public Health Emergency of International Concern in August 2014. Cases have also occurred in Senegal, Nigeria, Mali, the US and Spain.

Ebola virus is not found in the UK. Although the risk of imported cases is low, it remains unlikely, but not impossible, that travellers or returning aid workers infected in one of the affected countries could arrive in the UK while incubating the disease, develop symptoms after their return and become infectious. To date only 3 cases across the UK have been found.

Ebola transmission

Ebola virus is transmitted among humans through close and direct physical contact with infected body fluids. This means that the body fluids from an infected person (alive or dead) have touched someone's eyes, nose or mouth, or an open cut, wound or abrasion.

Infection can also occur if broken skin or mucous membranes of a healthy person come into contact with environments that have become contaminated with an Ebola patient's infectious fluids. Unlike infections like flu or measles, which can be spread by virus particles that remain in the air after an infected person coughs or sneezes, Ebola is not spread by the airborne route.

People infected with Ebola can only spread the virus to other people once they have developed symptoms. In the early symptomatic phase, virus is present in the blood however the level of virus in body fluids such as saliva is very low and unlikely to pose a transmission risk¹. In the late symptomatic phase, when vomiting and diarrhoea are present, all body fluids (such as blood, urine, faeces, vomit, saliva and semen) should be considered infectious, with blood, faeces and vomit being the most infectious.

¹ Towner JS, Rolin PE, Bausch DG, Sanchez A, Crary SM, Vincent M, et al. Rapid diagnosis of Ebola hemorrhagic fever by reverse transcription-PCR in an outbreak setting and assessment of patient viral load as a predictor of outcome. *Journal of Virology* 2004; 78(8): 4330-41.

General advice

The risk of community health and social care professionals coming into contact with a possible case of Ebola in the community is low. Ebola should be suspected in a patient with a fever of $\geq 37.5^{\circ}\text{C}$ or a history of fever in past 24 hours, and who has travelled to an affected area within the last 21 days OR has come into contact with the body fluids or clinical specimens of an individual known or strongly suspected to have Ebola.

Should you suspect that an individual you are caring for has Ebola infection, the individual should be isolated immediately and the attending health or social care professional should contact 111, who will arrange for appropriate transfer to a healthcare facility where they will be assessed clinically. The local health protection team (HPT) should also be notified, and will advise regarding further follow-up and decontamination of the premises where necessary.

Recommended action following exposure to potentially infectious material

In the event of mucosal membrane exposure to potentially infectious bodily fluids, the affected individual should contact their local HPT in the first instance, who will advise and arrange appropriate assessment and follow up where necessary.