

Ebola Virus Disease - Members' Briefing

1 What is Ebola?

Ebola virus disease (EBV), previously known as Ebola haemorrhagic fever, is a rare but severe disease which is caused by Ebola virus. It can result in uncontrolled bleeding, causing damage to the patient's vital organs. It was first recognised in 1976 and has caused sporadic outbreaks since in several African countries. The virus is initially transmitted to people from wild animals and spreads in the human population through human-to-human transmission through contact with blood and body fluids.

As of today there have been over 4,500 confirmed deaths and over 9000 confirmed, probable and suspected cases of Ebola recorded in seven countries, although widespread transmission is confined to Liberia, Sierra Leone and Guinea. This number is doubling every three to four weeks. This is the world's most serious outbreak to date.

The UN has declared the outbreak of Ebola Virus Disease [EVD] in West Africa an international public health emergency.

2 What are the symptoms?

An infected person will typically develop a fever, headache, joint and muscle pain, sore throat, and intense muscle weakness. These symptoms start suddenly, between 2 and 21 days after becoming infected, but usually after 5-7 days.

Diarrhoea, vomiting, a rash, stomach pain and impaired kidney and liver function follow. The patient then bleeds internally, and may also bleed from the ears, eyes, nose or mouth. Ebola virus disease is fatal in 50-90% of cases. The sooner a person is given care, the better the chances that they will survive.

3 Who is at risk?

Anyone who cares for an infected person or handles their blood or fluid samples or handles their body is at risk of becoming infected. Hospital workers, laboratory workers and family members are at greatest risk. Strict infection control procedures and wearing protective clothing minimises this risk.

4 Can you catch Ebola by touching the skin of someone who was symptomatic?

Even with a symptomatic person, direct contact with blood or body fluids is the only way Ebola is transmitted. Once symptomatic, all body fluids such as blood, urine, stool, vomit, sweat, saliva and semen are infectious. Ebola virus disease is **not** spread through ordinary social contact, such as shaking hands, travelling on public transport or sitting beside someone who is infected and does not have any symptoms.

5 Can you catch Ebola from someone without symptoms?

No. People infected with Ebola can only spread the virus to other people once they have developed symptoms, such as a fever. Even if someone has symptoms, it's important to remember that the virus is only transmitted by direct contact with the blood or body fluids of an infected person.

6 Is there a treatment for Ebola?

There is no specific vaccine or medicine that has yet been proven to be effective against Ebola. There is no cure for this disease, and antibiotics are not effective. In some instances, clinicians treating individuals with Ebola may source and decide to use an experimental drug, such as Zmapp. Severely ill patients require intensive supportive care, which may include rehydration with intravenous fluids.

7 Are people in the UK at risk of Ebola?

The overall risk to the general UK population continues to be low. The virus is only transmitted by direct contact with the blood or body fluids (such as blood, saliva or vomit) of an infected person. There are no cases identified in the UK at present so there is no risk of contracting the disease in the UK.

8 Are we going to see an outbreak of Ebola in the UK?

While the UK might see cases of imported Ebola, there is minimal risk of it spreading to the general population. England has a world class health care system with robust infection control systems and processes and disease control systems which have a proven record of dealing with imported infectious diseases. Ebola causes most harm in countries with less developed healthcare facilities and public health capacity.

9 Is there a public health risk from a person with Ebola coming into the country?

The incubation period of Ebola ranges from 2 to 21 days, and it is possible that a person infected in Guinea, Liberia or Sierra Leone could arrive in the UK. An individual infected with Ebola may arrive in the UK with symptoms which began prior to departure or with symptoms that developed in transit, or they may arrive before developing any symptoms.

10 How can you be sure that the UK is ready for an Ebola case?

Locally, Public Health England (PHE) is working with NHS England and local authority Directors of Public Health through the Local Health Resilience Partnerships (LHRPs) to ensure that plans are as robust as possible. PHE has existing strong partnership arrangements with the NHS, local authorities and ports covering all aspects of public health and infection control. Additional arrangements have been set up alongside these to ensure all information and guidance relating to Ebola is shared widely among partners, including setting up workshops and planning exercises.

11 What if someone thinks they might have Ebola?

Unless you've come into contact with the blood or bodily fluid of an infected person (for example by providing healthcare for a person with Ebola or handling the dead body of someone who died from Ebola), there is little chance of being infected. The advice is that if anyone is worried about symptoms (such as fever, chills, muscle aches, headache, nausea, vomiting, diarrhoea, sore throat or rash) within 21 days of coming back from Guinea, Liberia or Sierra Leone, they should stay at home and immediately telephone 111 or 999 and explain they have recently visited West Africa. If necessary, they would be taken by ambulance to hospital where they would be isolated and seen by healthcare staff wearing PPE. If required, blood samples would be taken for testing. If confirmed, there are arrangements for the patient to be

transferred safely to the high security infectious disease unit at the Royal Free Hospital, London.

12 Travel advice

The UK advises against all but essential travel to Sierra Leone, Guinea and Liberia due to the ongoing Ebola outbreak and the impact this is having on commercial flights and medical facilities. There are no direct flights from Sierra Leone, Guinea and Liberia to UK at present. Passengers are having to travel via Paris or Brussels.

13 Ebola planning and preparation

Screening

There are arrangements now in place to screen people returning to the UK from West Africa via key ports of entry, with a clear concern about the possibility of identifying an imported case within the NHS in England.

Public Health England has started to screen UK-bound passengers arriving at some airports and at the Eurostar terminal. This will allow potential cases arriving in the UK to be identified quickly and receive access to expert health advice.

Passengers will have their temperature taken and complete a questionnaire asking about their current health, recent travel history and whether they might be at potential risk through contact with Ebola patients. They will also be required to provide contact details.

If neither the questionnaire nor the temperature reading raises any concerns, passengers will be told how to make contact with the NHS should they develop Ebola symptoms within the 21 day incubation period, and allowed to continue on their journey. It is important to stress that a person with Ebola is only infectious if they are displaying symptoms.

Any passenger who reports recent exposure to people who may have Ebola, or symptoms, or who has a raised temperature will undergo a clinical assessment and, if necessary, will be transferred to hospital.

Passengers identified as having any level of increased risk of Ebola, but without any symptoms, will be given a PHE contact number to call should they develop any symptoms consistent with Ebola within the 21 day incubation period.

Higher risk individuals will be contacted on a daily basis by Public Health England. Should they develop symptoms, they will have the reassurance of knowing this system will get them timely medical care and the best possible chance of survival.

No screening procedure will be able to identify 100% of the people arriving from Ebola-affected countries, not least because not all passengers leaving the countries will immediately take connecting routes to the UK, so highly visible information is being displayed at all entry points to the UK asking passengers to identify themselves to staff if they have travelled to the affected region in the last 21 days.

NHS Services

NHS England (London) has been working closely with partners, including PHE, to support the preparations across London. This includes:

- Ensuring that updated viral haemorrhagic fever (VHF) algorithm and associated information is cascaded appropriately
- Engaging in multi-agency preparations
- Participation in a national exercise at Hillingdon Hospital and Urgent Care Centre, 12 October 2014
- Participation in multi-agency Gold level Strategic Coordinating Group (SCG) workshop, 15 October 2014
- Invitation to formal Strategic Control Group [SCG] on 22 October 2014 to agree an Ebola strategy for London
- Development of Regional NHS level exercises for both primary and secondary care providers
- Development of multi-agency patch level exercises to test local preparations

There is now a role for Local Health Resilience Partnerships to be assured that their organisations have developed local plans and arrangements to deal with suspected Ebola cases, whether they present through Emergency Departments or Urgent Care Centres.

NHS organisations have been asked to assure that they are prepared against the following headings:

- Personal protective equipment (PPE) stock and resupply mechanisms
- Training of staff in the correct use of PPE and any processes in place
- The mechanism and process for identification and isolation of a suspected case
- The use of transfer protocols
- The alerting mechanism – both internally and externally to NHS England (London)

Separate work is being undertaken within primary care.

Local Authorities

Workshops for all 33 Borough Resilience Fora (BRF) have been arranged for Wednesday 22nd October 2014. The aim of the training is to explore the local response to a confirmed case of Ebola identified from within the local community.

If a case is identified in the UK then there may be family and friends who need to be quarantined at home for up to 21 days. In this case local councils will need to support those people in their homes, ensuring the provision of food, utilities, phone card top-ups, Skype connections etc. All this can be undertaken with no physical contact.

The experience with people isolated because of the risk of SARS in Canada showed that it was important to remember and celebrate birthdays and anniversaries [if relevant] with cards, cakes and presents etc.

In the case of a death from EBV the coroner would have to investigate the case and ideally the body should be cremated. The body should be handled by staff in full PPE.

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