Public Health England

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Information for Primary Care: Managing patients who require assessment for Ebola virus disease

Updated 17 Oct 2014

This guidance is aimed at clinical staff undertaking direct patient care in primary care, including GP surgeries, out of hours centres and walk in centres. These guidelines should be available to staff and prominently displayed. GPs are advised to print out these guidelines for easy access.

Important contact details

Local Health Protection Team:

In hours number …….

Out of Hours number …….

Local Infectious Disease physician:

Name…….

Hospital…….

Contact number…….

Alternative number……

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Key messages for primary care

- **Assessment of a patient's risk of Ebola** should be led by the hospital medical team. However such patients may present initially to primary care and therefore primary care clinicians need to be aware of how to safely assess such patients and refer them appropriately to the local acute trust for review.
- All suspected Ebola cases that present to primary care should be discussed by the primary care clinician with the **local infection specialist** (consultant microbiologist, virologist or infectious disease physician) who will lead the risk assessment and arrange clinical review.
- Specific local advice (including **local arrangements for contacting your local infection specialist**) can be obtained from your local **PHE Health Protection Team**; find your local team using the postcode lookup, which gives both in hours and out of hours contact details.
- Individuals that **telephone** the surgery or walk-in centre and report that they are unwell and have visited an affected area in the past 21 days AND report a fever of >38°C or fever within the past 24 hours must be told not to visit the surgery or walk-in centre. The patient should be called back as soon as possible by the GP or duty doctor to risk assess prior to discussion with the local infection specialist
- Surgeries, out of hours centres and walk in centres should clearly display information requesting patients to tell the receptionist on arrival if they are unwell and have returned from an Ebola-affected area within the last 21 days. Any patients identifying themselves to **reception** staff should not sit in the general waiting room once Ebola is considered a possibility. These patients should be **isolated** in a single side room immediately to limit contact, and urgent clinical advice sought from the local infection specialist.
- If at the time of a consultation it becomes apparent that Ebola may be a possibility then the attending primary care clinician should take immediate steps to isolate the patient to limit further contact and seek advice from the local infection specialist. **Hand hygiene is an important infection control measure**; the Ebola virus is not a robust virus, and is readily inactivated, for example, by soap and water or by alcohol. It is important to remember that transmission of Ebola from person to person is only through direct contact with the blood or body fluids of a **symptomatic** infected person. There is no evidence of Ebola transmission through intact skin or through small droplet spread, such as coughing or sneezing.
- If a patient is being transferred to hospital, it is essential to alert the **ambulance service** and the **hospital** to the possibility of Ebola, as they will need to put special precautions in place to ensure the vehicle and Personal Protective Equipment (PPE) are appropriate to the condition of the patient.
- Cleaning and decontamination of any rooms in which a suspected or confirmed Ebola patient has been isolated or any facilities used by the patient should be discussed with the local Health Protection Team. In the event of a case being confirmed identification and follow up of contacts will be undertaken by the local Health Protection Team.

Ebola virus disease (EVD) is a rare but severe infection caused by Ebola virus. 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, the U.S. and Spain.

Ebola virus is not found in the United Kingdom. Although the risk of imported cases is low, it remains unlikely, but not impossible, that travellers or returning health care workers infected in Guinea, Liberia, or Sierra Leone could arrive in the UK while incubating the disease, develop symptoms after their return and present to primary care (the incubation period for Ebola is usually 5-7 days, but can range from 2 to 21 days). While a fever in persons who have travelled to Ebola transmission areas is more likely to be caused by a common infection, such as malaria or typhoid fever, primary care professionals in the UK should remain vigilant for those who have visited areas affected by this outbreak and subsequently become unwell.

Ebola transmission

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, transmission of Ebola from person to person is by direct contact with the blood or body fluids (e.g. saliva, vomitus, urine, stool and semen) of a symptomatic infected person. 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. There is no evidence of transmission of Ebola virus through intact skin or through small droplet spread, such as coughing or sneezing.

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 such as soiled clothing, bed linen, or used needles. The likelihood of contracting Ebola is considered low unless there has been this type of specific exposure. Ebola virus is not spread through routine, social contact (such as shaking hands or sitting next to someone) with asymptomatic individuals. People who have had social contact with symptomatic individuals with **confirmed** Ebola infection should be followed up as a contact through the local Health Protection Team.

The Ebola virus is not a robust virus, and is readily inactivated, for example, by soap and water or by alcohol.

Ebola risk

Anyone who has close physical contact with a person infected with Ebola who has symptoms of illness, or someone who handles blood or body fluid samples from Ebola patients should be using barrier nursing techniques and personal protective equipment (PPE).

Symptoms of Ebola

The illness usually begins suddenly with fever, headache, joint and muscle aches, sore throat and intense weakness. Stomach cramps, diarrhoea and vomiting may occur. Some individuals may develop a rash, red eyes, hiccups, and bleeding (eg from nose or mouth, blood in diarrhoea or vomit). In severe cases patients develop failure of the liver and kidneys.

It is important to remember that people infected with Ebola can only spread the virus to other people once they have developed symptoms. Once symptomatic, all body fluids such as blood, urine, stool, vomit, saliva and semen are infectious; however, the level of Ebola virus in certain body fluids (e.g. saliva) is thought to be very low in the early symptomatic phase.

Assessing patients at risk of Ebola virus disease

It is important to remember that Ebola virus is one cause of viral haemorrhagic fever (VHF), and other viruses causing VHF are endemic in a number of countries. Maps identifying VHF endemic areas can be found on the PHE website. Guidance for these cases is the same as for the current Ebola outbreak.

The **Advisory Committee on Dangerous Pathogens (ACDP)** guidance on Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence is the principal source of guidance for clinicians risk assessing and managing suspected Ebola cases. While this guidance is **targeted at hospital-based healthcare staff** (in emergency departments, infectious disease departments, infection control, microbiology/ virology, acute medical units), as well as ambulance staff, lab staff, public health, and mortuary staff, it may be a useful reference document for primary care.

- As outlined in the ACDP guidance, the **assessment of a patient's risk of Ebola (or other VHF) should be led by a senior member of the hospital medical team**.
- If a suspected Ebola case presents to primary care, the primary care clinician is responsible for ensuring that the suspected case is referred appropriately to the local acute trust for review.
- The primary care clinician should seek urgent clinical advice, in the first instance, from a local infection specialist (consultant microbiologist, virologist or infectious disease physician), and the risk assessment should be completed in conjunction with (and led by) them in accordance with the ACDP algorithm, and with discussion with their local PHE Centre.

Identifying patients at risk of Ebola virus disease

Ebola should be suspected in patients presenting to primary care services who have a fever of >38°C OR have a history of fever in the past 24 hours **AND** have recently visited any of the affected areas (as outlined previously) within the previous 21 days
OR
Have a fever of >38°C OR have a history of fever in the past 24 hours **AND** have cared for / come into contact with body fluids of / handled clinical specimens (blood, urine, faeces, tissues, laboratory cultures) from an individual or laboratory animal known or strongly suspected to have VHF.

- Individuals that telephone the surgery or walk-in centre and report that they are unwell and have visited an affected area in the past 21 days **AND** report a fever of >38°C or fever within the past 24 hours **should be told not to visit the surgery or walk-in**

centre. The primary care clinician is responsible for ensuring that they are referred appropriately to the local acute trust for review.

- Any patients **identifying themselves to reception staff** as being unwell and having visited an EVD affected area in the past 21 days should not sit in the general waiting room once Ebola is considered a possibility. These patients should be **isolated in a single side room immediately to limit contact,** and urgent clinical advice sought. Where possible the side room should be cleared of removable items to reduce cleaning requirements later if the patient is diagnosed with Ebola.
- Additional information that may assist with the subsequent risk assessment includes whether the presenting individual has come into contact with a person known/suspected to have Ebola, cared for anyone with a severe illness or who has died of an unknown cause, attended any funerals, had any contact with dead bodies, visited any traditional or spiritual healers, or been admitted to hospital in the affected areas.
- If a patient is suspected of Ebola only once they have been seen by the GP, the patient should remain in the GP's room. The GP should immediately contact the local infection specialist for assistance with the risk assessment. Assessment of the patient should be made without further physical contact if at all possible.
- If the patient is a suspected but not confirmed Ebola case, is relatively well (with very mild or no symptoms apart from fever), and requires assessment at hospital, the patient may use their own transport (not public transport) for travel to hospital for assessment
- If the suspected Ebola case has symptoms such as bruising, bleeding, or uncontrolled diarrhoea or vomiting then they should be transported to hospital using guidelines agreed with the ambulance service. Primary care professionals should urgently contact the ambulance service who will coordinate arrangements to transport the patient to hospital. Ambulance transport to hospital will avoid the use of public transport or the need to decontaminate a private car.
- It is **essential** to **alert the ambulance service** to the possibility of Ebola and the presence of symptoms such vomiting and diarrhoea or bleeding as they will need to put special precautions in place to ensure the vehicle and PPE are appropriate to the condition of the patient.
- It is important for primary care professionals to **alert the hospital** as to the arrival of the patient, the suspected diagnosis of Ebola and the presence of symptoms such vomiting and diarrhoea or bleeding, the method by which they will arrive and the importance of isolating the patient in a side room upon arrival.
- If there any specific queries about the public health management of suspected Ebola cases in the primary care setting or about this guidance, contact your **local PHEC Health Protection Team**, who will be able to address your query or signpost you appropriately; find your local team using the postcode lookup (see page 7 for web address)
- Once the suspected case has been transferred, the room in which the patient has been isolated or any potentially contaminated areas e.g. toilets should not be used until a

diagnosis of Ebola has been excluded. If the diagnosis is confirmed, specific advice on decontamination will be provided by the local Health Protection Team.

- If the patient has symptoms **limited to fever** with no vomiting or diarrhoea, then high contact surfaces such as door handles or touch screens should be wiped using standard disinfectants using standard precautions but the surgery **does not need to be closed**.
- The Ebola virus is susceptible to chlorine; therefore **bleach** is a suitable disinfectant for cleaning purposes. Typical household bleach (5.25%) needs to be diluted before use (use four times the amount of water as bleach e.g. one pint of bleach to four pints of water).
- The room in which the patient has been risk assessed, and the toilets if they have been used by the patient, should not be used pending discussion with the local Health Protection Team. However, the waiting area and surgery do not need to be closed.
- The GP may continue to consult if a different room is available, but should ensure they have washed their hands thoroughly with soap and water.
- If the patient has symptoms such as vomiting, diarrhoea and / or bleeding, the Health Protection team should be informed and **the surgery should be closed** pending a risk assessment by the infection specialist and the local Health Protection Team who will advise on appropriate decontamination. Patients and staff should leave the surgery but a record should be kept of people present during the time that the patient was on the premises.

- All waste, including used cleaning equipment such as gloves, paper towels and mops, should be put into impermeable waste bags, secured and stored in a safe undisturbed place until the suspected case has been assessed by a healthcare professional and/or a test result is available.

Notification of infectious disease requirements

Once a thorough assessment has been made and Ebola is either considered likely or has been confirmed by laboratory testing, the hospital clinicians will inform the local PHE Health Protection Team to ensure a thorough public health response and appropriate follow up of contacts. At that point, the Health Protection Team will identify and organise follow for any primary care contacts. A confirmation of Ebola infection and subsequent initiation of public health action usually occurs within 24 hours of admission to hospital.

If there any specific concerns in the primary care setting, your **local Health Protection Team** can be contacted to discuss any specific public health issues at the point of referral to hospital or if the patient has additional high risk factors.

Decontamination of rooms

Cleaning and decontamination of any rooms in which a patient has been isolated, or any facilities used by the patient, should be **discussed with the local Health Protection Team**. Once the suspected case has been transferred to secondary care, other patients and staff

should not use the room in which the patient has been isolated or any potentially contaminated areas until they have been decontaminated. This includes toilets and other high contact surfaces as outlined above.

The full risk assessment and initial investigations at hospital may rapidly exclude Ebola, at which point it may be clear that specific decontamination of the room is not required. It may be necessary to quarantine the room for up to 24 hours if the patient is being tested for Ebola at the hospital. If the diagnosis is confirmed, then **specific advice on decontamination and waste disposal** will be provided by the local Health Protection Team.

Public areas where the suspected case has passed through and spent minimal time in (such as corridors) but which are not visibly contaminated with bodily fluids do not need to be specially cleaned and disinfected.

Information about decontamination and cleaning, including laundry is detailed in Appendix 10 of the ACDP guidance for management of viral haemorrhagic fevers. Any decontamination and cleaning of an area occupied by a patient categorised as a high risk of Ebola should be conducted in appropriate PPE as listed in Appendix 8 of the same guidance.

Further guidance

- The Advisory Committee on Dangerous Pathogens (ACDP) guidance on Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence is the principal source of guidance for clinicians risk assessing and managing suspected cases.
- Further information can be found on the Public Health England website at: Ebola virus disease: clinical management and guidance.
- A PHE Epidemiology update reports the WHO number of cases on a weekly basis.
- Postcode lookup: http://legacytools.hpa.org.uk/AboutTheHPA/WhatTheAgencyDoes/LocalServices/PostcodeSearch/

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Management of patients who require assessment for Ebola in primary care

Scenario 1

Patient phones the surgery asking for clinical advice or an appointment

A) Does the patient have a fever [>38°C] or history of fever in past 24 hours AND
in the past 21 days, has the patient travelled to or transited through an affected country (Guinea, Liberia or Sierra Leone)
OR
B) Does the patient have a fever [>38°C] or history of fever in past 24 hours AND
in the past 21 days, has the patient cared for/ had contact with a confirmed or strongly suspected case of Ebola OR handled specimens or dead body of a confirmed/suspected case of Ebola

NO to A & B

Ebola unlikely; consider alternative diagnoses (eg malaria) & clinical review

YES to A and/or B

Advise the patient to isolate themselves at home – they should NOT visit the surgery or walk-in centre
GP to establish symptom history eg headache, weakness, muscle pain, vomiting, diarrhoea, abdominal pain or haemorrhage
Does the patient have uncontrolled vomiting, uncontrolled diarrhoea, extensive bruising or active bleeding?

YES

Patient unwell and at significant risk of Ebola infection

Contact ambulance service urgently for patient transfer to hospital for clinical assessment: **advise** ambulance service re potential Ebola risk.
Inform Infection Consultant that patient has been referred by ambulance for further assessment

NO

Is the patient relatively well? Mild or minor symptoms only?

Agree with the Infection Consultant whether the patient attends local Emergency Department for assessment or has telephone consultation with the Infection Consultant; patient may use own transport (not public transport) for travel to hospital for assessment

Scenario 2

Patient presents at the surgery asking for clinical assessment

A) Does the patient have a fever [>38°C] or history of fever in past 24 hours
AND
in the past 21 days, has the patient travelled to or transited through an affected country (Guinea, Liberia or Sierra Leone)

OR

B) Does the patient have a fever [>38°C] or history of fever in past 24 hours
AND
in the past 21 days, has the patient cared for/ had contact with a confirmed or strongly suspected case of Ebola OR handled specimens or dead body of a confirmed/suspected case of Ebola

GP to establish symptom history eg headache, weakness, muscle pain, vomiting, diarrhoea, abdominal pain or haemorrhage - does the patient have uncontrolled vomiting/diarrhoea, extensive bruising or active bleeding?

NO to A & B

Ebola unlikely; consider alternative diagnoses (eg malaria)

YES to A and/or B

Isolate the patient immediately in a single side room to limit contact- avoid further direct contact with patient

GP to seek URGENT CLINICAL ADVICE from the local hospital Infection Consultant (Infectious Disease/ Microbiology/ Virology) who will do the risk assessment according to the ACDP VHF risk assessment algorithm & arrange for clinical assessment & VHF screen where appropriate.

If hospital assessment advised then contact ambulance service for patient transfer to hospital for clinical assessment: advise ambulance service re potential Ebola risk

VHF result positive

Discuss with local PHE Health Protection Team re decontamination of the GP premises

Patient phones asking for a home visit as they feel too unwell to attend the surgery

A) Does the patient have a fever [>38°C] or history of fever in past 24 hours AND
in the past 21 days, has the patient travelled to or transited through an affected country (Guinea, Liberia or Sierra Leone)
OR
B) Does the patient have a fever [>38°C] or history of fever in past 24 hours AND
in the past 21 days, has the patient cared for/ had contact with a confirmed or strongly suspected case of Ebola OR handled specimens or dead body of a confirmed/suspected case of Ebola

NO to A & B

If a GP suspects Ebola once already at the patient's home, seek urgent advice from the local infectious disease physician or Health Protection Team

Ebola unlikely; consider alternative diagnoses (eg malaria) & clinical review

YES to A and/or B

Advise the patient to isolate themselves at home
DO NOT conduct a home visit
GP to establish symptom history eg headache, weakness, muscle pain, vomiting, diarrhoea, abdominal pain or haemorrhage
Does the patient have uncontrolled vomiting, uncontrolled diarrhoea, extensive bruising or active bleeding?

Patient unwell and at significant risk of Ebola infection

YES

Contact ambulance service for patient transfer to hospital for clinical assessment: advise ambulance service re potential Ebola risk.
Inform Infection Consultant that patient has been referred by ambulance for further assessment

Does the patient seem relatively well? Mild or minor symptoms only?

YES

Agree with the Infection Consultant whether the patient attends local Emergency Department for assessment or has telephone consultation with the Infection Consultant; patient may use own transport (not public transport) for travel to hospital for assessment