



Ebola: Information for Sewage and Water Handlers

This guidance is aimed at people concerned with risk of Ebola from working with any form of sewage. It should be read in conjunction with the guidance “Working with sewage, the health hazards: A guide for employers” produced by the Health and Safety Executive (HSE).

Key messages:

- Ebola is contracted by exposure of mucous membranes (such as the eyes, inside the nose or mouth) or broken skin to bodily fluids from an infected person
- Ebola virus is fragile and is unlikely to survive for long periods outside of the body
- if the Ebola virus enters the sewage system, it will be diluted and would likely degrade due to a number of factors such as disinfectants present in the hospital waste, temperature and waste processing
- there are no cases linking Ebola virus transmission to sewage, environmental waters or drinking water.
- water and sewage in the UK presents a minimal risk, the personal protective equipment (PPE) recommended by HSE (Working with sewage, the health hazards: A guide for employers) would be adequate to protect a sewage worker against pathogens including viruses in the sewage
- this HSE guidance advises on assessing and managing the risk from sewage including recommended PPE

Background

Ebola virus disease (EVD), a viral haemorrhagic fever (VHF), 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 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.

Ebola virus is not found in the UK. The risk of imported cases is low, however, 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 (the incubation period for Ebola can range from 2-21 days).

General principles to be considered for Ebola:

- in the UK it is very unlikely that patients with Ebola will be cared for in the non-healthcare setting
- Ebola virus is relatively fragile and is unlikely to survive for extended periods outside of the body
- to date, there is no evidence for transmission of Ebola viruses via drinking water
- as always when handling human waste, it is extremely important to follow good handwashing practices to reduce the risk of becoming infected

Ebola transmission

People infected with Ebola can only spread the virus to other people once they have developed symptoms:

- Ebola virus can only be transmitted among humans through close and direct physical contact with infected body fluids. This requires the body fluids from an infected person (alive or dead) to have entered someone's eyes, nose or mouth, or broken skin (eg through splashes of blood or other body fluids)
- infection can also occur if soiled clothing, bed linen or other environments that have become contaminated with the body fluids of an Ebola patient come into contact with another person's eyes, nose, mouth or broken skin
- in the late stage of disease, when vomiting and diarrhoea are present, all body fluids (such as blood, urine, faeces, vomit, saliva and semen) are considered infectious, with blood, faeces and vomit being the most infectious
- Ebola virus is not spread through routine, social contact (such as shaking hands) with asymptomatic individuals not showing symptoms

Recommended action following accidental exposure to Ebola infected sewage

In the event that an individual is directly exposed to sewage from a breach in their PPE, it must be remembered that the risk of contracting Ebola virus is low. However, sewage remains a major source of bacteria, parasites and other viruses as sewage treatment removes water and debris, but may not necessarily remove all micro-organisms. If exposed, individuals should follow their local policy for reporting incidents.

Further guidance

Further information on Ebola virus disease can be found on the PHE website:
[Ebola virus disease: clinical management and guidance](#).

HSE guidance: Working with sewage, the health hazards: a guide for employers
<http://www.hse.gov.uk/pubns/indg198.pdf> and Working with sewage, the health
hazards: a guide for employees <http://www.hse.gov.uk/pubns/indg197.pdf>.

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