

The Ebola virus



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Ebola, a reason for concern?

The current outbreak of Ebola in West Africa causes genuine concerns, even panic in some parts of the world. People are right to pay attention and to follow closely what is happening. However, the panic turns out more contagious than the disease itself. The general public has no reason to fear : so far, outside the affected countries, the only persons who contracted the Ebola virus disease were health care workers who treated Ebola patients. This brochure aims at giving some basic facts and recommendations.

Background information on Ebola

Precautions :

- hand hygiene
- floor & surface hygiene
- textile disinfection

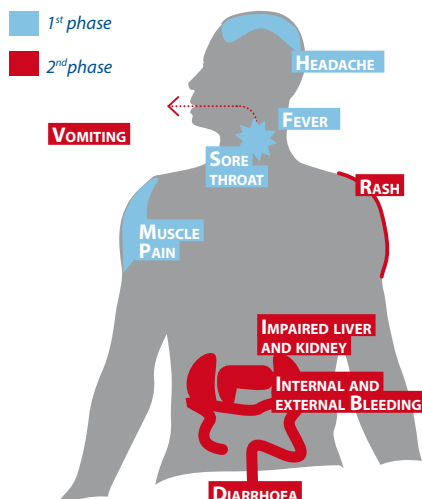
SOME BACKGROUND...

Ebola is a severe disease, caused by the Ebola virus. The virus is transmitted to people from wild animals and spreads through human-to-human transmission. Ebola virus disease (EVD) first appeared in Nzara (Sudan) and in Yambuku (Democratic Republic of Congo) near the Ebola River, from which the disease takes its name. There are as yet no proven treatment nor licenced vaccines or medicines available for EVD. The World Health Organization declared the 2014 outbreak of Ebola in Guinea, Liberia, Sierra Leone a "Public Health Event of International Concern".¹

CHARACTERISTICS OF EBOLA VIRUS

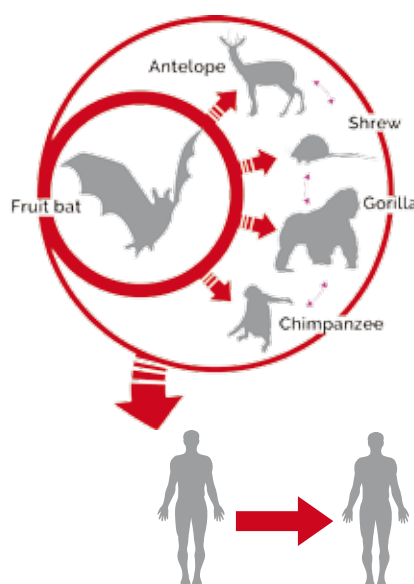
- Enveloped virus
- Class RNA
- Susceptible to **disinfectants and bleach**, and destroyed by heating²

SYMPTOMS



Symptoms can appear from **2 to 21 days** after exposure. People only become contagious once they start to show symptoms.¹

MODE OF TRANSMISSION³



Ebola is **not** transmitted through **air**



not transmitted through **water**



not transmitted through (properly cooked) **food**



Ebola is transmitted

- through **direct contact with blood or other bodily fluids** of people infected with or dead from Ebola
- through **indirect contact (with infected objects)**

Ebola enters the body through **mouth, nose and eyes**, or through a **break in the skin**.

GENERAL RECOMMENDATIONS

- Avoid contact with blood and bodily fluids of any person, particularly someone who is sick.
- Take care of proper hygiene in your facilities. Focus especially on hand hygiene.
- Do not panic. If the necessary measures are taken, the risk of being infected with EVD is quite low for the general public.
- Suspected case of Ebola? Consult your local health authorities and strictly follow all necessary procedures.

How to minimise the risks?

Enveloped viruses such as Ebola virus are susceptible to a broad range of disinfectants, and are much easier to kill than non-enveloped viruses such as Rotavirus. According to Robert Koch Institute, disinfectants with limited virucidal action (effective against enveloped viruses) are sufficient in case of contamination with Ebola virus. Obviously, virucidal disinfectants (against the more resistant non-enveloped viruses) can also be applied. ⁴ Disinfectants should meet EN 14476 norms or Guidelines of Robert Koch Institute.

Ebola is inactivated by disinfectant agents such as sodium hypochlorite, lipid solvents, phenolic disinfectants, peracetic acid, methyl alcohol, ether, sodium deoxycholate, 2% glutaraldehyde, 0.25% Triton X-100, β -propiolactone, 3% acetic acid (pH 2.5), formaldehyde and paraformaldehyde, and detergents such as sodium dodecyl sulphate (SDS). ⁵

In normal, daily life circumstances, the risk of being infected with the Ebola virus is low. To prevent far more common infections, like the common cold, norovirus or influenza, a proper hygiene is always important :



HAND & SKIN HYGIENE

- Wash your hands frequently with water and soap. Remove all visible dirt.
- If disinfection is needed, use an alcohol-based hand rub



SURFACES

- Clean surfaces regularly. Remove all visible dirt.
- Disinfect with an approved disinfectant.



TEXTILES

- In general, any linen from patients who suffer from a highly infectious disease such as Ebola, should be treated as biohazard waste and **incinerated**. ⁶
This linen should not be offered for treatment to textile service companies.
 - Disinfection of the linen can be done with a validated health care wash process (EN, RKI (AB process),...).
- http://www.rki.de/DE/Content/Infekt/Krankenhaushygiene/Desinfektionsmittel/Desinfektionsmittelliste.pdf?__blob=publicationFile

Health care workers or other persons who have direct or indirect contact with patients with suspected or confirmed cases of EVD need to follow much more stringent procedures, following the recommendations of the WHO and the respective national Health authority.

SOURCES

1. World Health Organization

<http://www.who.int/mediacentre/factsheets/fs103/en/>

<http://www.who.int/csr/disease/ebola/faq-ebola/en/>

2. European Centre for Disease Prevention and Control

http://ecdc.europa.eu/en/healthtopics/ebola_marburg_febv/factsheet_general_public/Pages/factsheet-general-public.aspx

3. Center for Disease Control and Prevention - US

http://www.cdc.gov/vhf/ebola/transmission/index.html?s_cid=cs_3923

4. Robert Koch Institute - Germany

<http://www.rki.de/DE/Content/InfAZ/E/Ebola/Uebersicht.html#doc5045280bodyText3>

http://www.rki.de/DE/Content/Infekt/Krankenhaushygiene/Desinfektionsmittel/Desinfektionsmittelliste.pdf?__blob=publicationFile

http://www.rki.de/DE/Content/InfAZ/E/Ebola/EbolaSchema.pdf?__blob=publicationFile

http://www.rki.de/DE/Content/InfAZ/E/Ebola/Ebola-Ma%C3%9Fnahmen-fuer-Fachpersonal_DL.pdf?__blob=publicationFile

5. Superior Health Council - Belgium

<http://www.shea-online.org/Portals/0/PDFs/Belgian-guidelines-ebola.pdf> superior Health Council - publication 9188

6. Hohenstein Institute - Germany

http://www.waeschereien.de/media/downloads/Bestandteil%20des%20Leitfadens_Nr%20206%20Gefaehrliche%20Erreger%20in%20der%20Waescherei.pdf

Still real concerns about Ebola?

Please listen to and follow the directives issued by your country's public health authority

Check the recommendations of the **World Health Organisation** - **www.who.int**