

Information for seafarers and shipowners

Ebola Virus Disease (EVD)

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1. What is Ebola Virus Disease (EVD)?

The Ebola Virus Disease (EVD) is a haemorrhagic fever caused by viruses and characterized by the occurrence of internal and even external bleeding (haemorrhages).

Ebola is a rare, severe disease which is often fatal. There is neither a vaccine nor a specific treatment for this disease.

2. Current spread of the Ebola Virus Disease (EVD)

Since December 2013 outbreaks have occurred in West Africa: Guinea, Liberia, Nigeria and Sierra Leone.

Seafarers travelling to or returning from the affected areas should observe the following information.

3. Transmission

A transmission is possible through direct contact with bodily fluids (blood, saliva, vomit, urine, excrement, breast milk, semen) of a living or dead infected person. Contact with bodily fluids also includes unprotected sexual intercourse with an infected person for up to seven weeks after recovery from illness.

Cursory contact in public with a person who is free of symptoms will not transmit Ebola. Neither will it be spread by touching money or food or swimming in a public pool. Mosquitoes do not transmit the Ebola virus either.

Infection can also be caused by direct contact with blood and other bodily fluids of living and dead wild animals, for example monkeys, apes, forest antelopes and (fruit) bats.

So far there is no evidence of a transmission of Ebola onto humans through air.

4. Prevention

The risk of contact with the Ebola virus is very low. The following preventative actions should eliminate the risk of infection:

- Do not touch ill or deceased people.
- Avoid contact with objects that have come in contact with ill people (e.g. injection needles with blood).
- Do not eat the meat of wild animals (e.g. bats, monkeys, apes, antelopes), so called bushmeat.
- Do not touch living or dead "wild animals". Do not eat half-eaten fruit.
- Vegetables and fruit should be washed well, peeled and cooked.
- Wash your hands regularly with soap.
- Clean and disinfect dirty surfaces.
- Avoid unprotected sexual intercourse.

The Ebola virus can be easily killed with soap, bleaching agents, sunlight or drying. If clothing that has come in contact with the Ebola Virus is washed in the washing machine, the Ebola virus will be killed off. On surfaces that are dried or exposed to direct sunlight the virus survives only a short time.

5. Symptoms of the disease

From two to up to 21 days after the infection, the illness can suddenly set in with fever, muscle pain, weakness, headache and a sore throat.

The next state of the illness is marked by vomiting, diarrhoea, rash as well as impaired liver and kidney function. Some patients exhibit internal and external bleeding as well as multiple organ failure.

6. Code of practice after the onset of symptoms

a) If you as a seafarer are affected

If you develop a fever, unexplained fatigue, diarrhoea or other serious symptoms up to three weeks after your return from a tropical region affected by Ebola Virus Disease, you should:

- Consult a physician immediately and mention your travels.
- Avoid public facilities.
- Inform the medical staff by phone before your visit in order for them to be able to take appropriate protective measures.

b) If other people on board are affected

If a person traveling on board a ship displays symptoms, the following safety measures have to be adopted:

- Keep their cabin door closed, if they are not placed in a medical isolation room on board.
- Provide information about the risk of Ebola transmission to persons who will take care of the patient or enter the isolation area.
- Maintain a log listing all people entering the cabin.
- Anyone who enters the cabin to provide care to the person in isolation or to clean the cabin must wear personal protective equipment (PPE) with:
 - o A surgical protection mask; and eye protection or a face shield
 - o non-sterile examination gloves or surgical gloves
 - o A disposable impermeable gown to cover clothing and exposed skin. A waterproof apron should be worn over a permeable gown or when coming into close contact with the person in isolation.
- Remove any PPE before exiting the isolation room in such a way as to avoid contact with the contaminated objects and any area of the face.

- The patient is only allowed to be moved out of the cabin for important reasons. If transport is necessary, the patient should wear a surgical mask.
- Remove and disinfect any spillage without spraying or the creation of aerosol (vapour, fog, etc.).
- Used linen, cloths, eating utensils, laundry and any other item in contact with a patient's body fluids should be collected separately and disinfected in such a way as to avoid any creation of aerosol or any contact with people or contamination of the environment. An effective disinfectant is a dilution of sodium hypochlorite (chlorine bleach) at 0.05 (percent by weight) or 500 ppm (= parts per million) active chlorine and a contact time of 30 minutes.
- All waste produced in the isolation cabin must be handled according to the effective protocol of the ship for clinical waste. If an incinerator is available on board, waste must be incinerated. If waste has to be delivered ashore, special precautions have to be taken and the port authority should be informed before waste delivery.
- Start a case investigation immediately. Protective equipment is not required when interviewing asymptomatic individuals, if a distance of one metre is maintained.
- Identify close contacts and ask them to conduct a passive selfmonitoring of their temperature (e.g. monitoring temperature only if they feel feverish) and their symptoms, or an active self-monitoring (e.g. by regular temperature measurement twice a day for 21 days).

In the event of a suspected diagnosis of Ebola Virus Disease on a ship, immediate advice by the telemedical maritime assistance service should be sought. Every master is obliged to report the suspected diagnosis of Ebola Virus Disease to the appropriate port health services of the next and the last port of call immediately.

This leaflet has been established in corporation with Dr. Dirksen-Fischer, head of the "Arbeitskreis der Küstenländer für Schiffshygiene" (AkKü, working group of the coastal states for ship sanitation), and Ms. Geiger, port pharmacy Hamburg.