Ebola Virus Disease

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Ebola virus disease (EVD)

- Formerly known as Ebola haemorrhagic fever
- Causative agent: Ebola virus
- First appeared in 1976 in South Sudan and the Democratic Republic of Congo. The disease has appeared sporadically since then





Ebola virus disease (EVD)

- Confirmed cases of EVD have been reported mainly in sub-Saharan Africa including the Democratic Republic of the Congo, Gabon, South Sudan, Cote D'Ivoire, Uganda, and Congo
- Ebola virus outbreak occurred in West Africa since March 2014 is the largest outbreak since the Ebola virus was first discovered in 1976
- EVD outbreak was reported in the Democratic Republic of the Congo in August 2018, with more than 3000 cases reported by October 2019



Ebola virus disease (EVD)

Incubation period: ranges from 2 to 21 days



- Clinical features:
 - Sudden onset of fever, intense weakness, muscle pain, headache and sore throat
 - Vomiting, diarrhoea, rash, impaired kidney and liver function
 - In some cases, internal and external bleeding
- Case fatality rate in human is around 50% (varied from 25% to 90% from previous outbreaks)





Mode of transmission

- Ebola virus is introduced into the human population through close contact with the blood, secretions, organs or other body fluids of infected animals
- Some fruit bats are considered to be the natural host of the Ebola virus
- It then spreads in the community through humanto-human transmission, with infection resulting from:
 - Direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other body fluids of infected people
 - Indirect contact with environments contaminated with such fluids





Mode of transmission

- People are infectious as long as their blood and secretions contain the virus
- Burial ceremonies in which mourners have direct contact with the body of the deceased person can also play a role in the transmission of EVD
- Healthcare workers in affected countries have frequently been infected through close contact with patients suffering from EVD when infection control measures are not strictly practised





Mode of transmission

- Samples from patients are biohazardous and testing should be conducted under appropriate biological containment conditions
- Although rare, sexual transmission of Ebola virus has been reported





Management

- Currently no specific treatment for the disease
- Patients must be managed in isolation facilities to prevent the spread of the infection
- Patients are frequently dehydrated and require oral or intravenous rehydration
- Healthcare workers should put on personal protective equipment and adopt strict infection control measures when caring for suspected patients





Local situation

- Viral haemorrhagic fever, including EVD, has been a statutorily notifiable infectious disease since July 2008
- No cases have been recorded in human or animals in Hong Kong so far.
- In case of notification of suspected cases, the CHP will immediately commence epidemiology investigation and follow-up





Local situation

- Upon notification of suspected cases, CHP will:
 - Refer patients to the Infectious Disease Centre of the Hospital Authority for isolation, diagnosis and treatment; and
 - Collect specimens for laboratory testing and confirmation
- Upon laboratory confirmation, CHP will:
 - Trace close contacts, including corresponding flight passengers and attendants;
 - Put close contacts under medical surveillance and isolation; and
 - Send symptomatic close contacts for isolation and testing





Prevention

- There is currently no registered vaccine for EVD in Hong Kong
- To prevent the infection, travellers must observe the following:
 - Observe good personal and environmental hygiene ____
 - Avoid close contact with feverish or ill persons, and avoid contact with patients' blood and body fluids, and objects contaminated with blood or body fluids of patients
 - Avoid contact with animals
 - Cook food thoroughly before consumption







Maintain good personal hygiene

- Perform hand hygiene frequently. Wash hands with liquid soap and water, and rub for at least 20 seconds. Then rinse with water and dry with either a clean cotton towel or a paper towel, especially:
 - Before and after touching the mouth, nose or eyes
 - Before eating
 - After using the toilet
 - After touching public installations such as handrails or door knobs
 - When hands are contaminated by respiratory secretion after coughing or sneezing









Hand hygiene

- Wet hands under running water
- 2. Apply liquid soap and rub hands together to make a soapy lather
- 3. Away from the running water, rub hands according to the 7 steps of hand hygiene technique for at least 20 seconds (Palms, Back of hands, Finger webs, Back of fingers, Thumbs, Finger Tips, Wrists). Do not rinse off the soap while rubbing
- 4. Rinse hands thoroughly under running water
- 5. Dry hands thoroughly with either a clean cotton towel or a paper towel
- 6. The cleaned hands should not touch the water tap directly again. For example: using a paper towel to wrap the faucet before turn it off
 - If hand washing facilities are not available, or when hands are not visibly soiled, hand hygiene with 70 to 80% alcohol-based handrub is an effective alternative







Travel advice

- Avoid unnecessary travel to affected areas
- Travellers returning from affected areas should observe closely their health condition
- Travellers should seek medical advice promptly if they become ill within 21 days after returning from affected areas and inform the doctor of recent travel history





For more information about Ebola virus disease

- Please visit the Centre for Health Protection website http://www.chp.gov.hk/en/features/34199.html
- Please visit the website of Travel Health Service of the Department of Health for more information on travel health news

https://www.travelhealth.gov.hk/eindex.html





Thank you



