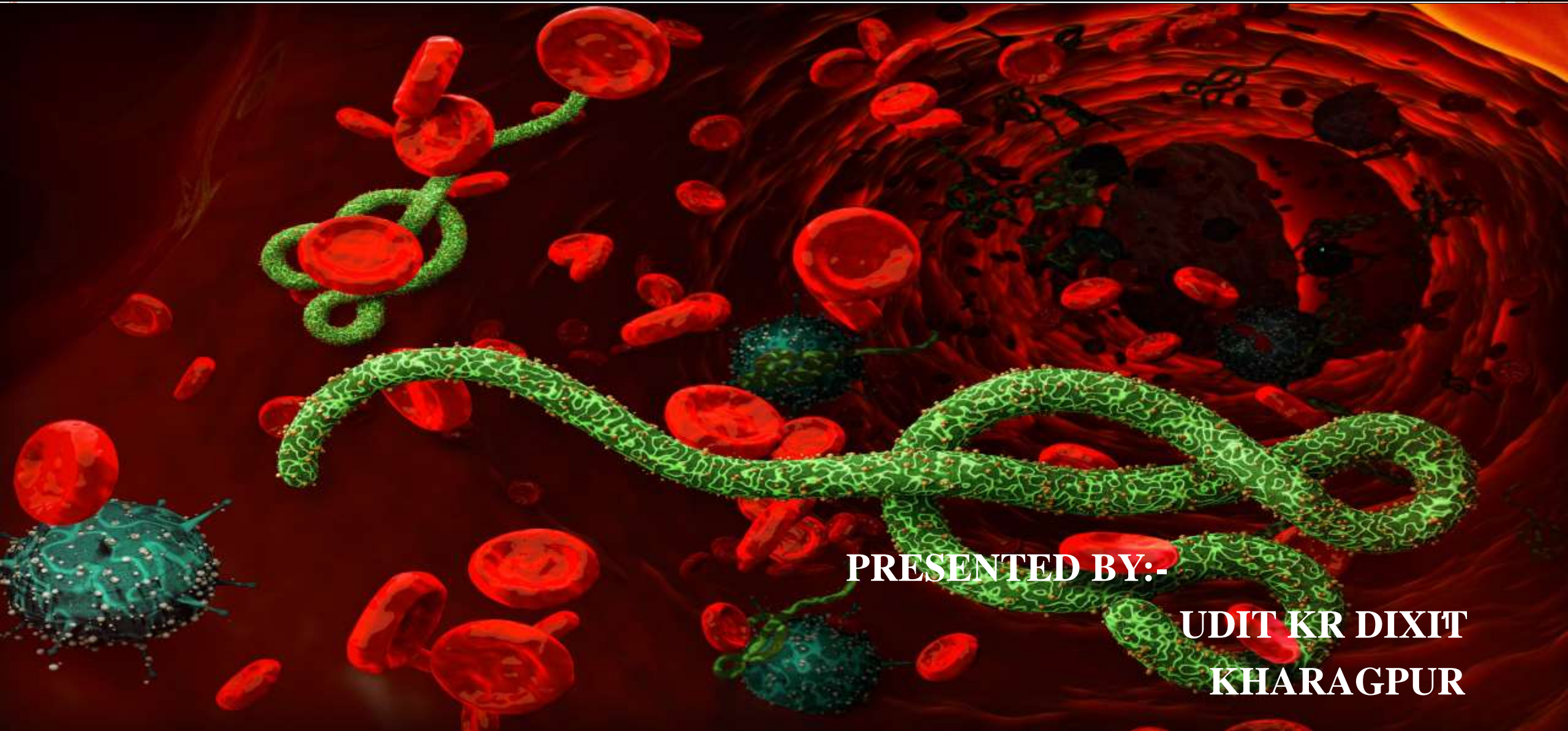




EBOLA VIRUS



PRESENTED BY:-

UDIT KR DIXIT
KHARAGPUR



OBJECTIVES

At the end of this topic you will be able to know about :-

- What is EBOLA?
- Mode of transmission of EVD.
- Signs & Symptoms of EVD.
- Diagnosis of EVD.
- Treatment/vaccine of EVD.
- How to prevent, Do's & Don't of EVD



EBOLA VIRUS

- Ebola is a deadly disease caused by a virus.
- After entering the body, it kills cells, making some of them explode.
- It wrecks the immune system, causes heavy bleeding inside the body, and damages almost every organ.
- Ebola virus disease(EVD),also known as Ebola haemorrhagic fever (EHF).



FIRST APPEARANCE OF EVD

- The disease was first identify in 1976 in two simultaneous outbreaks,
 - 1) Nazra(a town in South Sudan)
 - 2)Yambuku(Democratic Republic of the Congo)a village near the Ebola river.
- From which disease takes is name EB



RECENTLY AFFECTED COUNTRIES

- Nigeria
- Senegal
- Liberia
- Guinea
- Sierra Leone
- Spain
- USA



Every country with confirmed Ebola cases

Sources: WHO, CDC



Modes of Transmission

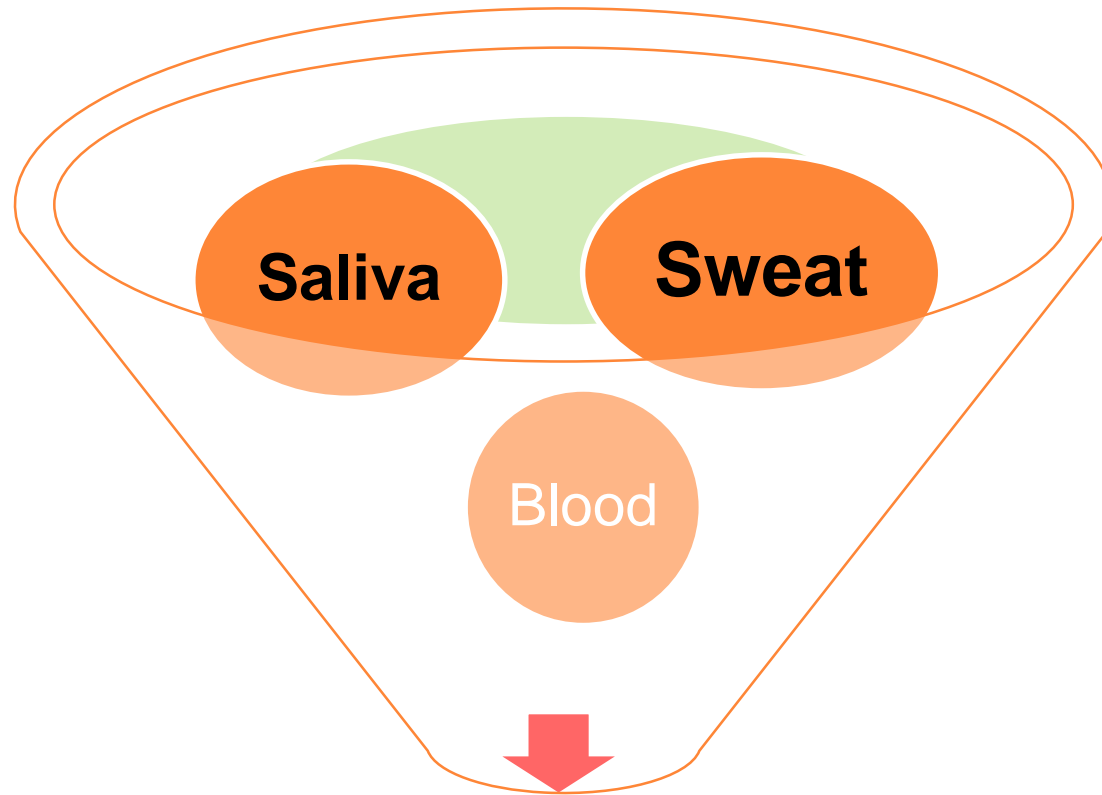
- People can get Ebola in West Africa by preparing these sick animals for food.
- The virus spreads by direct contact with body fluids, such as blood, of an infected human or other animals.
- Health-care workers have frequently been infected while treating patients with suspected or confirmed EVD, due to close contact with patients.

Modes of Transmission

- Natural reservoir host of Ebola virus has not yet been identified.
- Researchers believed that the first patient becomes infected through contact with an infected animals like chimpanzees, gorillas, fruit bats, monkeys etc.

Types of Body Fluids That involves in transmission of Ebola virus

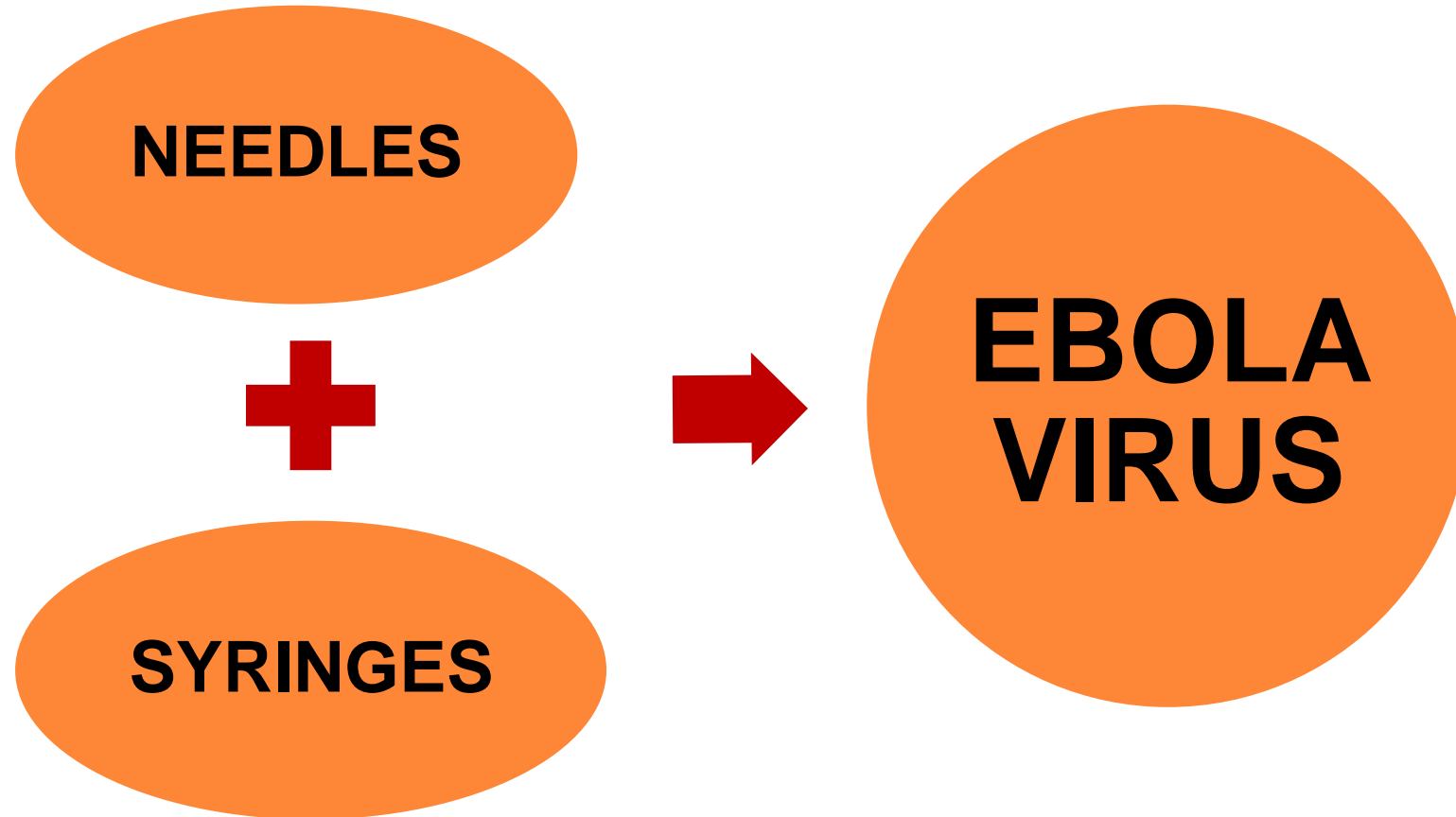
➤ BODY FLUIDS



EBOLA VIRUS



CONTAMINATED OBJECTS THROUGH WHICH EBOLA VIRUS TRANSMITS



OTHER WAYES IN WHICH EBOLA VIRUS CAN TRANSMIT



- TOUCHING THE SOILED CLOTHES OF INFECTED PERSON



- HAVING SEXUAL CONTACT WITH INFECTED PERSON



- HANDLING UNSTERILISED MEDICAL EQUIPMENT



Signs & Symptoms

- Incubation Period: 2 to 21 days
- Fever, headaches, joint and muscle aches, sore throat, and weakness.
- These are followed by diarrhea, vomiting, & stomach pains.
- Initial symptoms include high fever (at least 102°F).

Signs & Symptoms

- In some cases, internal and external bleeding may occur. This begins 5 to 7 days after first symptoms.
- Death, if it occurs follows 06 to 16 days from 1st symptoms & is often due to low blood pressure from fluid loss.
- People are often in coma near the end of life.

FEVER



HEADACHE



NAUSEA



TIREDNESS



Diarrhea

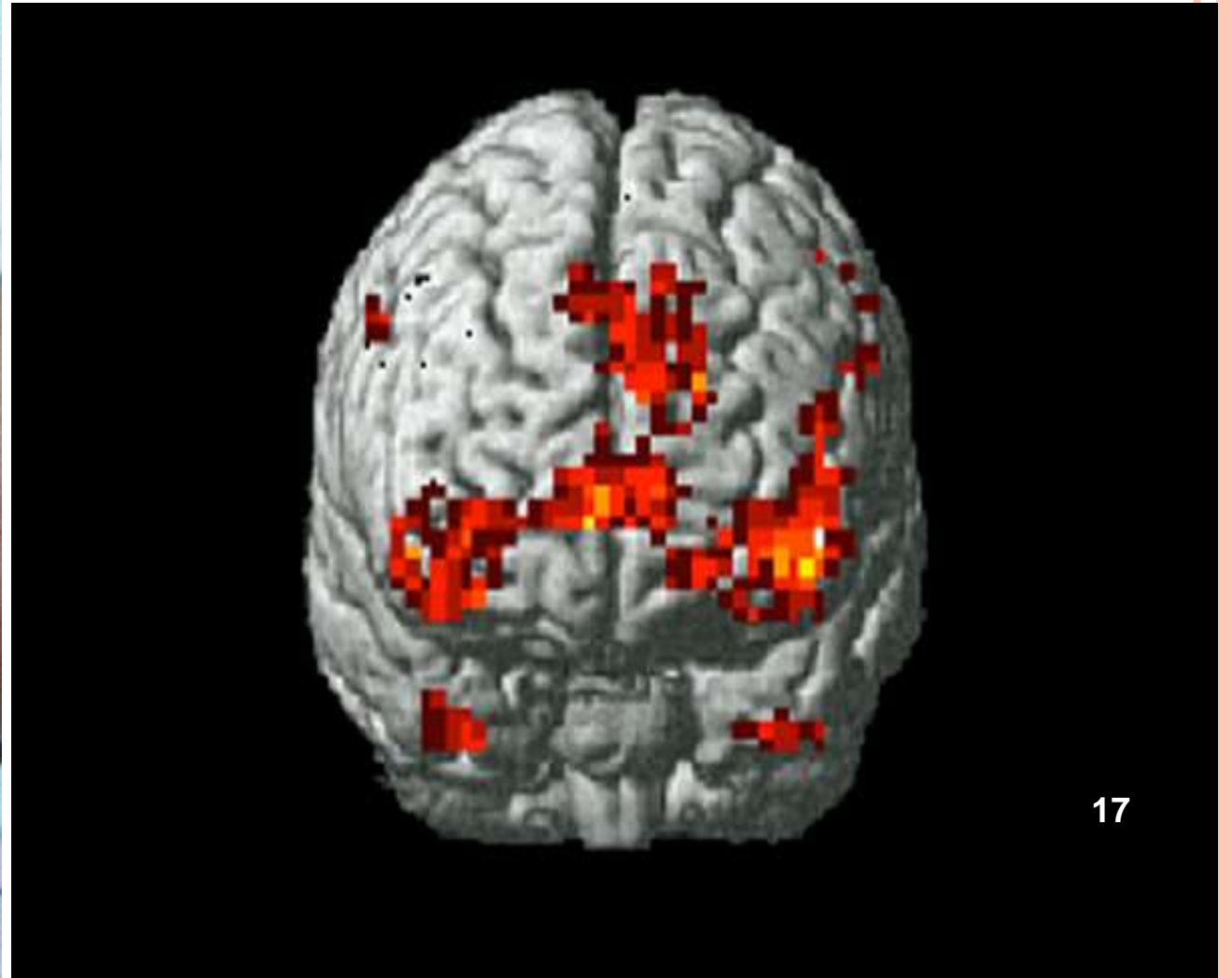


Vomiting



Rashes

BRAIN DAMAGE



How Ebola Symptoms Progress

Infection with the Ebola virus can lead to flu-like symptoms, bleeding (both visible and internal) and, in many cases, death. The current outbreak has a mortality rate of around 60 percent.

EXPOSURE

INCUBATION

COURSE OF ILLNESS

DEATH

Usually lasts between 6–10 days.

Symptoms typically begin 4–9 days after exposure, though incubation may last for up to 21 days.

DAYS 1–3

In the first few days of illness, patients have flu-like symptoms and profound weakness.

DAYS 4–7

Around days 4–7, patients may also have vomiting, diarrhea, nausea, low blood pressure, headaches and anemia.

DAYS 7–10

Toward the end of the illness, there is confusion and bleeding, both internal and visible. All of this progresses toward coma, shock and death.

Source: Dr. Nahid Bhadelia M.D., M.A., Associate Hospital Epidemiologist, Boston Medical Center Director of Infection Control, National Emerging Infectious Disease Laboratories, Boston University

THE HUFFINGTON POST

DIAGNOSIS OF EVD

- Ebola is often confused with Malaria, Typhoid fever, dysentery, etc.
- So Ebola is diagnosed through saliva and urine tests.
- Blood samples are tested for viral RNA, viral antibodies or for the virus itself to confirm the diagnosis.

DIAGNOSIS OF EVD

- Detecting the viral RNA by polymerase chain reaction (PCR).
- Detecting proteins by Enzyme-linked Immuno Sorbent Assay (ELISA).
- These are methods best used in the early stages of the disease and also for detecting the virus in human remains.

Treatment/Vaccine Of EVD

- Treatment effective begun within 04 days and continued for 10 days course.
- There is no standard treatment & Vaccine for Ebola.
- Only supportive treatment, which includes balancing patient's fluids ,maintaining oxygen, blood pressure, & treating any complications.

A New Drug Target For Ebola Virus

- Researchers have recently developed a new drug target in the Ebola virus that could be used against it .
- University of Utah chemists have produced a molecule known as *peptide mimic* that displays a functionally critical region of the virus that is universally conserved in all known species of Ebola

HOW TO PREVENT EVD

- If have sudden fever, diarrhoea, or vomiting, go to the nearest health facility
- Make no contact with Ebola affected people
- Use a special kind of clothes while treating Ebola affected people



**PROTECT YOURSELF
PROTECT YOUR FAMILY
PROTECT YOUR COMMUNITY**

from the **Ebola** virus



-  **Always wash your hands with soap and**
-  **Always cook your food properly**
-  **Go to health facility anytime you have head ache, fever, pain, diarrhea, red eyes rash and vomiting**
-  **Tell everyone you meet about Ebola so they can be informed**
-  **Call for help or questions**
0886520581 or 0886374733



-  **Do not touch people with signs of Ebola or have died of Ebola**
-  **Do not touch clothes & bed cloths of people who have died of Ebola**
-  **Do not touch vomit, saliva, urine, blood and poo of people who have signs and symptoms of Ebola**
-  **Do not play with monkeys and baboons**
-  **Do not eat bush meat**
-  **Do not eat plums eaten by bats**

REVIEW



- **At the end of this topic you are now able to know about.**
- **What is EBOLA?**
- **Mode of transmission of EVD**
- **Signs & Symptoms of EVD**
- **Diagnosis of EVD**
- **Treatment/vaccine of EVD**
- **How to prevent, Do's & Don't of EVD.**



CONCLUSION

In a nutshell we can say that





EVALUATION

➤ Q.EHF STANDS FOR ?

➤ A.EBOLA HAEMORRAGIC FEVER.





Thanks