# Ebola

Ebola hemorrhagic fever (Ebola) is a very contagious illness that is often fatal in humans and nonhuman primates (monkeys, gorillas, and chimpanzees). It has appeared sporadically since it was first recognized in 1976 the Republic of the Congo (formerly Zaire).

## Causes

The virus is one of two members of a family of RNA viruses called Filoviridae. There are five identified subtypes of Ebola virus. Three of the four have caused disease in humans:

Bundibugyo virus (BDBV),

Ebola virus (EBOV),

Sudan virus (SUDV),

and Taï Forest virus (TAFV).

The fifth virus, Reston virus (RESTV)

### Epidemiology

Ebola outbreaks typically appear sporadically. Confirmed cases of Ebola virus infections have been reported in:

- The Democratic Republic of the Congo
- The Ivory Coast
- Gabon
- Sudan
- Uganda.

### Transmission

Once Ebola virus infects the first human, transmission of Ebola continues through direct contact with an infected person, or his or her body fluids (such as blood or secretions). The spread of the virus from an infected person most often occurs during the late stages of an Ebola infection.

### **Ebola Symptoms**

After four to six days on average, Ebolasymptoms can begin. The Ebola incubation period can be as short as 2 days or as long as 21 days.

#### Common Ebola Symptoms

The start of Ebola symptoms is usually abrupt. Common Ebola symptoms can include:

- Fever
- Sore throat
- Weakness
- Severe headache
- Joint and muscle aches
- Diarrhea
- Vomiting
- Dehydration
- Dry, hacking cough
- Stomach pain.

A rash, red eyes, hiccups, and internal and external bleeding may be seen in some patients. When the rash develops on dark skin, it is often not recognized until the rash begins to peel.

In pregnant women, abortion (miscarriage) and heavy vaginal bleeding are common Ebola symptoms.

Death usually occurs during the second week of Ebola symptoms. Death in Ebola victims is usually from massive blood loss.

# **Ebola Diagnosis**

When making an Ebola diagnosis, the doctor will ask about the patient's medical history and perform a physical exam. Diagnosing Ebola early can be difficult, due to the fact that the early symptoms of Ebola can be similar to those seen with other medical conditions. The doctor may order lab tests that can identify the virus itself or antibodies that the body makes to fight the Ebola virus.

# **Ebola Treatment**

For people with Ebola, treatment involves providing relief of Ebola symptoms while the body fights the infection. This type of treatment is known as supportive care. Ebola treatment can involve the use of intravenous fluids, antibiotics, and oxygen. Treatment may also include the use of medications to control fever, help the blood clot, and maintain blood pressure. Even with such supportive care, death occurs in 50 to 90 percent of people with Ebola.

# **Ebola Prevention**

prevention involves avoiding direct contact with the body fluid of infected people. Also, it's important to avoid direct contact with the body of an Ebola victim who has died. prevention focuses on being able to recognize cases of the disease when they appear, as well as using barrier isolation techniques to avoid direct contact with infected people.

- The use of infection-control measures, including complete sterilization of equipment
- The isolation of patients with Ebola hemorrhagic fever from contact with unprotected people
- The wearing of protective clothing, such as masks, gloves, gowns.

### **Ebola Vaccine**

There is not yet a licensed Ebola vaccine for humans; however, a vaccine has been shown to be effective in monkeys. If this vaccine proves similarly effective in humans, it may one day allow scientists to quickly contain Ebola outbreaks