

## **Chapare Virus**

The Chapare Virus belongs to the arenavirus family, which can cause Chapare Hemorrhagic Fever (CHHF). It is believed to have originated in Bolivia in 2003 and is named after the province where it was first observed.

In 2020, due to the spread of Corona virus, the US Centers for Disease Control and Prevention (CDC) started their research for other deadly viruses, and discovered the Chapare Virus. In this article, we shall discuss in detail about this virus, its symptoms, and how it may be hazardous in the future.

# About the Chapare Virus

While studying about more viruses which can be a cause of concern for the people across the world in the future, the Chapare virus came up as one of the deadliest of all.

- Chapare virus belongs to the family of arenavirus and is extremely infectious
- It can cause Chapare Hemorrhagic Fever (CHHF)
- The virus can spread from human to human in case of direct contact with an infected rodent
- It was first observed in Bolivia, where it had not caused much of a pandemic and came under control in no time, but can be dangerous if reborn in the future
- The virus is said to create an Ebola-like illness. Ebola Virus Disease (EVD) spread through West Africa between 2014 and 2016. It affected over 25000 people in West Africa and over 10000 people had died due to the virus. To know more about the <u>Ebola Pandemic</u>, visit the linked article

For information about <u>What is a Virus</u> and how they spread in a community, candidates can visit the linked article. Also, the list of common diseases caused by deadly viruses has been discussed in the linked article.

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# What is the Chapare Hemorrhagic Fever?

Chapare hemorrhagic fever (CHHF) is a viral hemorrhagic fever caused by infection with Chapare virus. Till date, there have been two outbreaks of this virus:

1. Chapare Province, Bolivia [2003] - Where one fatal case was registered



2. Caranavi Province, Bolivia [2019] - Where a total of 5 cases were registered, of which three were fatal cases

#### Symptoms of Chapare Hemorrhagic Fever

Since a limited number of cases were registered for CHHF, not much information about the incubation period is available. Few common symptoms which have been noticed by CDC are:

- Fever
- Vomiting
- Headache
- Diarrhea
- Joint and Muscle pain
- Pain behind the eyes
- Irritability
- Stomach Pain
- Bleeding Gums

### Chapare Virus - Transmission

- The virus can be transmitted from one human to another
- Through direct or indirect contact with the urine, saliva or droppings of a rodent
- It can also spread through direct contact with body fluids
- Also, the transmission can occur during healthcare procedures of the infected person

Aspirants can also know about the various Diseases and their Causing agents at the linked article.

## Diagnosis & Treatment of Chapare hemorrhagic fever (CHHF)

The virus communicable and thus, as per Disease Control and Prevention (CDC), highest biosecurity standards available must be followed to diagnose, study or research the Chapare Virus.

There is no treatment available to cure this disease and only a supportive therapy is prescribed to recover from this fever. The revival therapy includes:

- 1. Keeping the body hydrated
- 2. Sedation
- 3. Pain Killers to relive the body from bodily pain
- 4. Fluid Resuscitation, i.e., replenishing the body fluids like sweat, blood, or other pathological fluids. This will help in shock management
- 5. Tnasfusuin, i.e., transferring of blood or its components into a body to replace the lost components of blood

In the two previous outbreaks, the number of documented patients have been very low. Thus, the recovery or mortality rate cannot be calculated. However, researchers believe, this virus would not be as contagious as the <u>Novel Coronavirus</u>, spread through the entire world in 2019-20.



#### Prevention of Chapare virus transmission

Multiple precautions can be taken to prevent the transmission of Chapare virus:

- Rodent control within the houses and localities is the first thing to focus on, to prevent the transmission of chapare virus
- Traps to decrease rodents must be placed and the consumption of any food item which may have been in contact with rodents must be avoided
- The virus does stay in the body of the infected person for a while, even after they have recovered. Thus, one must avoid contact with with the infected people until they test completely negative
- Healthcare settings must be completely secure and highest level of biosecurity must be followed as the disease is communicable

### Risk of Future Exposure of Chapare Virus

The main source through which the virus can transmit from one human body to another is via fluids. Thus, CDC researchers believe that the virus is not very easy to transmit and only the family of the person infected and healthcare workers may have the risk of being infected with the Chapare Virus.

It is not airborne and cannot be transmitted through the particles in the surrounding, which makes the exposure limited.

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