



## Hemorrhagic Fever Symptoms: Marburg, Ebola Virus

**Onset:** Symptoms may begin abruptly within five to 10 days but may take as long as up to 30 days following exposure/infection with Ebola virus or Marburg virus.

Early signs and symptoms include:

- Fever, chills, weakness
- Severe headache
- Joint and muscle aches

As the viral illness worsens, symptoms become increasingly severe, including:

- Nausea and vomiting
- Diarrhea, watery progressing to bloody
- Red eyes
- Bruising
- Skin rash
- Chest pain, sore throat, cough
- Abdominal cramping, jaundice, and upper GI pain
- Severe weight loss
- Internal Bleeding, usually from the eyes, and when close to death, possible bleeding from the ears, nose and rectum

As the illnesses progress, symptoms and signs become more severe:

- Bleeding, leading to hypovolemic shock
- Delirium, seizures, coma, and death



**Complications in Survivors:** Recovery can be long and slow since the viruses remain in the body for weeks. It may take months to regain weight and strength. People may experience:

- Diffuse muscle weakness
- Severe fatigue
- Sensory changes
- Headaches
- Hair loss
- Inflammation of the eyes, heart, liver (hepatitis), ovaries and testicles

**PRE-EXPOSURE PROPHYLAXIS: Marburg, Ebola:**

**Rx Medications:** (see NIH studies):

- Albendazole (FDA-approved “de-wormer”): 400 mg once when using for parasites; dosing frequency not established for Marburg virus
- Mebendazole (FDA-approved “de-wormer”): 100 mg BID for 3 days when using for parasites; dosing frequency not established for Marburg virus
- Hydroxychloroquine and IVM, in dosing similar to COVID, have been reported to help in the Hemorrhagic fever family of viruses.

**Supplements and Nutraceuticals:** These have research-based evidence for anti-viral, anti-inflammatory, and immune-boosting benefits in the spectrum of viral illnesses

- Aspirin 81 mg prevention dose, 325 mg full-strength anti-platelet dose
- Vitamin D (in oil): 5000 IU AM and PM
- Zinc sulfate 220 mg daily (50 mg elemental zinc)
- N-acetyl cysteine (NAC) 600-1200 mg daily
- Vitamin C with bioflavonoids 2000 mg (increase if symptoms times a day)
- Magnesium 400 mg once or twice a day
- B complex
- Mushroom powder



### **Antioxidant Boosters:**

- Glutathione
- Flavinoids
- Quercetin
- Green tea
- Elderberry juice
- Co-Q-10
- Resveratrol 500 mg
- Monolaurin (derived from coconuts)
- Blackseed oil (N-sativa seed)

### **If Hospitalized:**

**Supportive hospital care includes:** fluids, maintain blood pressure, oxygen therapy replacing lost blood, treating secondary infections

### **Transmission:**

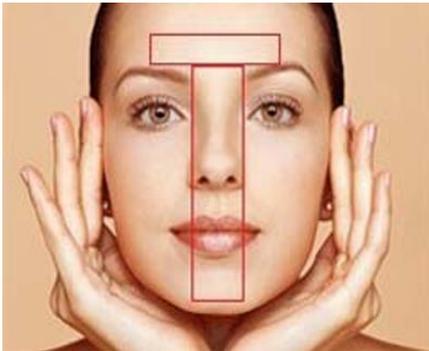
Most hemorrhagic fevers, particularly Marburg and Ebola, are spread through person-to-person contact. This means when secretions (saliva, blood, vomit, stool, vaginal secretions, and semen) of a symptomatically infected person come into contact with the mucous membranes (mouth, nose, eyes or breaks in the skin) of someone who is uninfected, the virus spreads. Family members can be infected as they care for sick relatives or prepare the dead for burial. Healthcare personnel can be infected if not using proper protective equipment that covers them from head to toe.

### **Importance of hygiene practices and environmental management:**

The risk of spreading illness can be reduced by using good hand washing, avoiding contact with the “T” zone and quality environmental decontamination efforts. The “T” zone is an area of the face routinely touched during daily activity. This contact typically is unconscious or a result of habit. Most people think this happens only in children, but it is just as common in adults.



By paying close attention to your hand and finger contact with your eyes, nose and mouth, then working to change those habits, you can learn to limit exposure to infectious organisms. Always wash your hands before touching your eyes, nose and mouth, **ESPECIALLY** when you are exposed to someone who is sick.



### **Environmental Management: Decontamination Strategies**

At this time Chlorine dioxide solution (CDS) is the leading agent used for environmental decontamination to control the spread of Ebola outbreaks in West Africa by the US Military. Chlorine dioxide solution has been used safely and effectively in cleaning and sterilization efforts in the medical, agricultural, and industrial communities for decades. There are many patents related to the safe use of CDS for purifying water, treating wounds, sterilizing of medical equipment and much, more. The two solutions used to make the activated CDC are easy to purchase, inexpensive and stable to store. You can learn more about its use in Ebola decontamination by visiting the “Health and Resilience” page on our website and by reading this article: <https://www.frontiersin.org/articles/10.3389/fmicb.2015.00663/full>

**Bottom line: Marburg and Ebola are LOW transmissibility but high mortality. PREVENTION and early treatment are keys to survival.**

#### **References:**

<https://www.sciencedirect.com/science/article/pii/S1201971220305865>

[Ebola virus and Marburg virus - Symptoms and causes - Mayo Clinic](#)

<https://www.balanceofnature.com> This is just one of many resources for products combining many of the supplements and nutraceuticals listed above to make it easier to add these to your daily health plan.