

Emerging Global Health Challenges: Which Poses a Greater Threat, Ebola Virus or Hantavirus?

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Editorial

The world is experiencing more epidemics today than at any point in recent history, yet global readiness to respond is steadily slipping backwards. Pandemic risks, unstable geopolitics, and rapidly changing ecosystems have begun to outpace the world's ability to prepare, creating conditions where future outbreaks may become far harder to manage (Global Preparedness Monitoring Board, 2026). As the global health system weakens, emerging viruses such as Ebola and hantavirus are appearing more frequently and with greater severity; from Ebola surging in the Democratic Republic of the Congo and Uganda to hantavirus emerging unexpectedly on international cruise ships. In this rising landscape of vulnerability, which of these threats poses the greater global risk?

To determine which virus poses the greater global risk, it is essential to examine how each behaves within a world that is increasingly unprepared for new outbreaks. Ebola typically enters human populations through contact with infected animals and then spreads efficiently through human-to-human transmission. Hantavirus, by contrast, is primarily transmitted from infected rodents to humans, with human-to-human spread occurring far less frequently (WHO, 2026) (WHO, 2025). Although both viruses are severe and potentially fatal, Ebola's high transmissibility and mortality give it a clearer global threat profile, while hantavirus presents a different challenge: its symptoms often resemble mild illnesses, leading to delayed diagnosis and unpredictable detection patterns (BBC World Service, 2012).

While Ebola and hantavirus differ in their transmission dynamics, both are classic examples of zoonotic diseases that underscore the importance of the One Health approach. Human encroachment into wildlife habitats, deforestation, agricultural expansion, biodiversity loss, and climate change continue to increase interactions between humans, wildlife, and animal reservoirs. These environmental changes facilitate the emergence and re-emergence of infectious diseases, making future spillover events increasingly likely. Consequently, strengthening collaboration among public health, veterinary, environmental, and wildlife sectors should become a central component of global preparedness strategies rather than a reactive response once outbreaks occur.

Another important lesson from both Ebola and hantavirus outbreaks is that preparedness cannot be measured solely by the availability of vaccines or clinical treatment. Robust surveillance systems, rapid laboratory diagnosis, effective risk communication, trained public health personnel, and cross-border information sharing are equally critical. Many countries continue to struggle with fragmented surveillance systems and inadequate laboratory capacity, resulting in delayed outbreak detection and response. Investing in preparedness before outbreaks occur remains substantially more cost-effective than responding after epidemics have already spread.

Bundibugyo virus disease (BVD), a severe form of Ebola, is currently affecting communities in the Democratic Republic of the Congo and Uganda. The virus is believed to originate from non-human primates or bats, and its rapid evolution raises growing concern. With no approved vaccines or specific treatments available, control efforts rely entirely on early case detection, isolation, and supportive care (WHO, 2026). Comparatively, the recent cruise ship-linked hantavirus outbreak was alarming because it travelled through 32 countries within a week, demonstrating how quickly even a rodent-borne virus can cross borders. However, WHO's assessment indicates that the overall global risk remains relatively low: the Andes virus; the only hantavirus strain capable of human-to-human transmission, requires close and prolonged contact for spread. The danger of Hanta virus lies in delayed diagnoses (WHO, 2026).

The question is not simply which virus poses more risk, but whether the world is prepared for what comes next? Both outbreaks could have been contained more effectively with stronger surveillance and preparedness systems, yet global capacity continues to erode, making timely public health responses increasingly difficult. Budget constraints have already forced major cutbacks, including a reduction in the WHO's operating budget following the U.S. withdrawal, limiting the organisation's ability to support outbreak response, early detection, and rapid containment (France 24, 2025). This decline in global readiness leaves the world increasingly vulnerable, regardless of whether the next threat emerges from Ebola, hantavirus, or an entirely new pathogen. Strengthening

surveillance systems, investing in One Health approaches, and restoring sustainable global health financing should therefore become urgent international priorities before the next epidemic emerges.

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