

Mpox and H5N1 bird flu viruses continue on the march

Bill Shaw

21 November 2024

Amidst a lackadaisical public health response, two viruses with pandemic potential continue to spread in the United States. The California Department of Health reported the first case of mpox in the United States caused by the clade I mpox virus. Concurrently, the Centers for Disease Control and Prevention (CDC) confirmed five new human cases of H5N1 (bird flu) in the state of Washington.

The mpox case is concerning because the clade I mpox virus causes more severe illness and death than the clade II virus and thus is considered “more aggressive.” The case fatality rate in clade I mpox outbreaks has ranged from three percent to 11 percent.

The patient in California had recently traveled from East Africa and is assumed to have contracted the infection there, where an outbreak of clade I virus is ongoing. Based on symptoms and travel history, the patient was tested for mpox, which confirmed infection. The patient had mild symptoms and was permitted to return home and self-isolate there.

In August, the World Health Organization declared the ongoing global clade I mpox infections in Africa a public health emergency of international concern (PHEIC). As reported by the WSWS at the time, the response of politicians and public health officials was largely silence with minimal follow-through to combat it.

That lack of urgency has now resulted in the confirmed appearance of the virus in the United States. The failure of the global capitalist system to eradicate the virus has enabled the outbreaks in East and Central Africa to fester, which in turn enabled the virus to travel to the United States.

At present, authorities believe that the mpox virus is spread only through close personal contact including sexual activity. Although they do not believe that

casual contact poses a significant risk of transmission, they are nevertheless investigating travelers who shared the airplane with the patient in California.

Previously, the rapid spread around the world of the clade II mpox virus raised the specter of respiratory transmission. A detailed review of the evidence in a *Lancet Microbe* article assessed the risk of respiratory transmission of clade II to be low, but could not rule it out and called for further studies and vigilance.

Multiple outbreaks of clade II are still ongoing and were the subject of a WHO declaration of a PHEIC in 2022, which is still active. The WHO is holding an emergency meeting next week to determine whether PHEIC status still applies to these outbreaks of clade II.

While clade I mpox virus appeared in North America for the first time, the CDC announced five new human cases of H5N1 avian influenza in the state of Washington. A sixth presumptive positive case there is under investigation. All five infected individuals are farmworkers who had mild symptoms and did not require hospitalization. They are assumed to have contracted the virus from infected dairy cattle on farms where they work.

Wastewater monitoring in California has detected H5N1 virus in 21 of 28 monitoring sites statewide, including Los Angeles, San Francisco, Palo Alto, San Diego, and San Jose. Authorities do not know for certain how the H5N1 is getting into wastewater, but current hypotheses include unpasteurized milk, wild bird droppings, and discarded animal products.

A recent case of H5N1 in a young man in British Columbia, who is critically ill, has undergone further study. Scientists isolated and sequenced the virus from the patient. They found that this H5N1 variant is different from the one circulating in birds and cattle in

the US and Canada

They also found that the virus has undergone several “unsettling” mutations. Specifically one mutation, known as PB2 E627X, makes it easier for the H5N1 virus to infect humans. This increases the potential for human-to-human transmission, which would very likely trigger a new pandemic. The mutation also makes the virus more lethal, helping to explain the patient’s critical illness.

In the meantime, a study published in *Nature Communications* last week showed that H5N1 virus circulated among southern elephant seals in Argentina, Uruguay, and Brazil in 2023. This means that the H5N1 virus has shown the capability for transnational mammal-to-mammal transmission for the first time.

The study notes that: “From a public health perspective, mammal-to-mammal transmission could be a stepping-stone in the evolutionary pathway for these viruses to become capable of human-to-human transmission.”

The elephant seal populations were devastated by the outbreak, with a case fatality rate of 95 percent among pups of one group of seals.

Valeria Falabella, co-author of the study and Wildlife Conservation Society in Argentina director of coastal and marine conservation said: “We were totally appalled by the dramatic impact of the epidemic of avian influenza on this population. It will take decades before the numbers are back to the 2022 population size.”

Several researchers on the study are part of Argentina’s Institute of Virology and Technological Innovations. This agency is in turn part of Argentina’s National Council of Scientific and Technical Investigations, Spanish acronym CONICET.

This fact is significant because Argentina’s fascist president Javier Milei has cut the budget of CONICET by over 30 percent since 2023. It is also telling that Milei was the first foreign leader hosted by US President-elect Donald Trump after the election.

Trump’s hosting of Milei and his nomination of anti-science hucksters to key roles in his administration signals that he will similarly gut research and public health measures aimed at preventing the next pandemic. Future studies of H5N1 transmission and evolution would be eliminated, leaving workers in the dark about the growing threat and practically ensuring the

emergence of future pandemics.

The ongoing march around the world of two highly dangerous viruses, enabled by the ruling class policy of profit over lives which in turn dictates the gutting of public health science and practice, is a warning to the working class. The working class can only re-organize society to prevent future pandemics by organizing its own, independent political struggle against capitalism through the International Committee of the Fourth International.



To contact the WSWS and the Socialist Equality Party visit:

wsws.org/contact