

## First Confirmed Fatal Human Case of “H5N2” Avian Influenza in Mexico.



The World Health Organization announced on Wednesday, June 5 the world's first case of human infection with the H5N2 avian influenza virus.

The confirmed case was a 59-year-old male resident of the State of Mexico with multiple underlying medical conditions. On April 17, he developed a fever and shortness of breath. He was hospitalized on April 24 and died the same day due to complications of his condition. The source of exposure to the virus in this case is currently unknown; however, WHO assesses the current risk to the general population posed by this virus as low.

The H5N2 avian influenza virus is different from the highly pathogenic avian influenza virus H5N1, which infected three individuals who had been exposed to infected cattle or were involved in the livestock industry in the United States in March and May of this year.

Meanwhile, the WHO also announced on June 7 that a 2.5-year-old female infant contracted the H5N1 Influenza A virus on her way back to Australia from India and underwent treatment in Australia. This was the first human case of H5N1 bird flu in Australia.

WHO expressed concern that the risk of human-to-human infection might increase if H5N1 started spreading among the mammal population and posed threats of an outbreak, potentially leading to virus mutation.

With the backdrop of an increase in global population and rapid economic advancement, human activities have caused various environmental destruction including global warming, deforestation, and desertification. These changes in the natural environment have disrupted animal ecosystems and their habitats, resulting in confusion at the interface between wildlife and human society.

Furthermore, this trend has also led to an increase in human exposure to wildlife, which are natural hosts of various pathogenic microorganisms, contributing to the frequent occurrence of zoonotic diseases worldwide. Therefore, the prediction of virus emergence, the implementation of preventive measures, and the containment of these pathogens through the development and use of effective vaccines and medicines are essential.

In the meantime, on November 20, 2013, the Japan Medical Association and the Japan Veterinary Medical Association concluded the "Agreement on Academic Collaboration"—a groundbreaking interdisciplinary initiative aimed at sharing information on zoonotic diseases and establishing a framework for cooperation in vaccine research, thereby enhancing preparedness against avian flu and other zoonoses.



**【Avian Influenza Does Not Necessarily Refer to Novel Influenza】**

Avian Influenza is typically a bird’s disease. While humans can sometimes contract bird flu, its transmission between humans is rare.

However, if the virus undergoes specific mutations and gains the ability to sustain human-to-human transmission, the virus strain would then be classified as a novel influenza virus.

