

hand hygiene

I Like Animals and a Few People

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Greetings, humans. I know you've been keeping an intensely close eye on me, studying me to ensure my risk to your population remains low. Thus far, although human cases have been recorded, human-to-human transmission is rare, only reported in a small number of people who had close unprotected exposure to a symptomatic human case but no exposure to certain animals. Although it would take considerable genetic changes for me to pose a significant threat to your population and subsequently sustain human-to-human transmission, it's why you continue to monitor me, conducting ongoing genetic analysis to identify any changes that would allow for easier spread among the human population. But currently, I mostly hang with the birds, and recently, I've taken a liking to many other animals.

I'm a familiar virus, but my subtypes are primarily identified in the bird population, specifically in wild birds and poultry, with some spillover into cows, pigs, and humans. I'm often classified into 2 distinct categories: low pathogenicity and high pathogenicity. This classification has historically helped to distinguish between infections with me in birds that result in no signs or symptoms of disease and those that result in severe disease and high mortality rates. This classification, however, does not refer to how infectious or severe my virus would be to humans.

In 1996, I made some domestic waterfowl in southern China very unhappy and caused quite a bit of concern in the human population when I was first identified as the cause of those waterfowl outbreaks. In 1997, several more outbreaks in feathered creatures in China and Hong Kong



To discover who I am, visit [InfectionControlToday.com/view/July-2024-bug-month](https://www.infectioncontroltoday.com/view/July-2024-bug-month)

occurred, with 18 associated spillover cases identified in humans. Since my discovery, approximately 890 cases have been identified in humans, with a case mortality rate of 50%. Humans have long been concerned about my subtypes' infection in the bird population as a risk for future pandemics. However, this would require some mutation in the genetic makeup of my virus that would allow for easier human-to-human transmission. To date, human cases have been sporadic since my discovery and associated with exposure to infected birds and mammals. Ongoing surveillance for infections in these populations through established networks is being used to monitor for any new activity of my virus in these populations and the human population.

Signs and symptoms of infections in humans have varied from no symptoms or mild symptoms, such as conjunctivitis, to severe respiratory symptoms, such as pneumonia, requiring hospitalization. Additional symptoms have included fever, cough, sore throat, muscle or body aches, headaches, fatigue, and shortness of breath, which are symptoms shared with other respiratory infections. Because respiratory infections can be difficult to distinguish, individuals exposed to populations infected with my virus must monitor closely for signs or symptoms of infection. I may spread from infected birds or mammals from several different routes. These transmission routes include contact with surfaces contaminated with my virus, splashes or sprays from liquids contaminated with the virus, and

eating, drinking, or inhaling droplets contaminated with my virus. People at home should avoid unpasteurized milk and cheese products and cook poultry and beef products thoroughly.

For individuals frequently exposed to affected populations, specific measures should be taken to avoid acquiring my infection from infected birds and mammals. First, humans working with susceptible bird and mammal populations should take extra care to avoid exposure to sick birds or mammals. When in contact with dairy cows, raw milk, or other items potentially contaminated with my virus, it's recommended that individuals wear protective equipment, including a waterproof apron, gloves, face shield, boots, hair cover, and respirator. After exposure to potentially affected mammals or birds, individuals should monitor themselves closely and immediately contact their physician if they experience any signs or symptoms of respiratory infection.

Laboratory testing is required to confirm infection with me, as symptoms are vague and may represent infection with other respiratory viruses. Health care providers should include questions about exposure to sick bird and dairy cattle populations in their history and physical questions for patients presenting with respiratory virus symptoms to gauge suspicion of infection with my virus and implement appropriate precautions while conducting further assessment and testing.

I am Avian Influenza A. □