Highly Pathogenic Avian Influenza A(H5N1) Situation Update

Current as of May 24, 2024

The recent highly pathogenic avian influenza A(H5N1) virus outbreak in US dairy cattle has drawn significant attention since the USDA reported detections in dairy herds in Texas and Kansas on March 25, 2024. According to the US Centers for Disease Control and Prevention (CDC), as of May 22, 2024, the virus has spread to at least 58 dairy herds in 9 states (Texas, Kansas, New Mexico, Idaho, Michigan, Ohio, North Carolina, South Dakota, and Colorado). There have also been 2 human infections reported in dairy farm workers; the first case was reported on April 1, 2024, in Texas and the second reported on May 22, 2024, in Michigan. These cases raise concerns about the impact on public health. Although H5N1 historically has caused deaths in about 50% of recorded human cases, both of the US patients had mild symptoms and both recovered at home. Human-to-human transmission of the virus has been reported in previous outbreaks but has not reported in the US to date.

The risks to human health from this outbreak are complex and may change rapidly. The risks are also highly uncertain because of a current lack of surveillance data and other basic scientific and epidemiological information. However, some initial indicators—such as the extent of the current H5N1 outbreak in cattle across multiple US states, the detection of H5 virus in wastewater in Texas, and high mortality in H5N1-infected cats that live on affected farms—signal an increased risk of H5N1 infection for some agricultural workers.

Public health experts at the CDC and the Johns Hopkins Center for Health Security maintain that the risk to the general public continues to be low. They warn that additional, sporadic, human cases should be expected and may be most likely to arise among dairy farm workers. CDC also recommends that individuals with work or recreational exposures to animals potentially infected with H5N1 should follow additional precautions, such as wearing personal protective equipment (PPE) when encountering sick animals, animal carcasses, raw milk, or surfaces or materials that may have come in contact with animal excretions (eg, ponds, clothing, buckets, etc.). PPE includes properly fitted unvented or indirectly vented safety goggles, disposable gloves, boots or boot covers, a NIOSH-approved particulate respirator (eg, N95® filtering facepiece respirator, ideally fit-tested), disposable fluid-resistant coveralls, and disposable head/hair cover. Agricultural workers or other individuals who may have been exposed to infected animals or infected animal products (eg, slaughterhouse workers, raw milk transporters, etc.) experiencing conjunctivitis (eye redness) or flu-like symptoms should contact a healthcare provider for testing.

At this time, the best protection against H5N1 is wearing PPE when in contact with animals and animal materials suspected of H5N1 infection, consuming only pasteurized (not “raw”) milk products, fully cooking animal products, practicing good hand hygiene, and isolating
or quarantining if directed by a provider or public health professional.⁹ Effective vaccines to prevent H5N1 infection in humans are currently unavailable in the US; however, federal health officials have identified a candidate vaccine that is expected to be effective. The candidate vaccine is currently stored in bulk, but is being separated into multidose vials to better position for rapid deployment of the 4.8 million doses if needed.¹¹

References


