Bird Flu's Current Opponent: Dairy

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This week, federal authorities announced that they had discovered inactive fragments of the bird flu virus in grocery store samples of pasteurized milk. How did we get to this point? Is this another public health crisis?

The ongoing bird flu or Highly Pathogenic Avian Influenza (HPAI) outbreak in the United States began with a commercial flock in February 2022, for the second time in less than a decade. Since February 2022, more than 90 million birds in commercial and backyard poultry flocks have been culled. In addition to the loss to the agriculture industry of the birds themselves, the loss of egg-laying hens resulted in price spikes in the cost of shell eggs, and farmers have experienced losses resulting from down time due to sanitation and replacement of their flocks, as well as significant additional costs related to depopulation and disposal that far exceed the available federal assistance. There have been continuing detections of bird flu in bird flocks in various U.S. locations.

In a new development over the last two months, U.S. authorities have discovered bird flu infections in dairy cattle in Texas and over 30 other U.S. locations. While illness in cattle was not previously detected in the U.S., it was known that mammals could be infected simply because the virus had spread in various parts of the world to mammals such as sea lions, seals, and mink. It has not been clear whether the infection source was infected birds or whether the virus is being dispersed among mammals. Some scientists, after examining genetic data published by the USDA related to dairy cattle, concluded that the initial infection was "bird-to-cow" and thereafter among cattle.

From the start of the current HPAI outbreak in 2022, it has been known that the bird flu is zoonotic and that, in the past, it has been capable of infecting humans. At the same time that dairy cattle in the U.S. have been infected, two humans have been found to be infected with bird flu. Thus far, it seems that dairy cattle infections and human infections of the HPAI virus have caused limited illness. The Centers for Disease Control have urged immediate treatment with approved anti-influenza drugs as soon as the possibility of an HPAI infection of a human is suspected.

On April 23, the U.S. Food and Drug Administration announced that fragments of the bird flu virus have been discovered in samples of pasteurized milk from around the country. The FDA indicated that the viral fragments do not pose a threat to human consumers and are inactive genetic fragments or remnants of the bird flu virus. Federal officials did not fully reveal how many samples of pasteurized milk had tested positive for viral fragments or the source of the milk samples. If the presence of viral fragments is ubiquitous, then it seems far more likely that the bird flu outbreak among dairy cattle is more widespread than initially understood. Most milk produced in the U.S. is pasteurized, a process that kills pathogens with heat, and milk intended to be sold in interstate commerce must be pasteurized under the FDA's long standing Pasteurized Milk Ordinance rules. We have not yet seen comments from federal authorities or the scientific community regarding the risk of contracting HPAI from unpasteurized milk, although regulators have long discouraged the consumption of raw, unpasteurized milk because of its propensity to transmit various diseases.

Under these circumstances, the importance of maintaining strict biosecurity measures in agricultural operations is paramount. On April 12, the Pennsylvania Department of Agriculture providednotice of rules and quarantines governing the importation of dairy cattle into Pennsylvania from premises where there is an HPAI infection in cattle. On April 23, the USDA announceddairy cattle testing requirementsas a prerequisite to the interstate transportation of cattle, as well as mandatory reporting requirements for laboratories and veterinarians obtaining positive test results of HPAI in livestock. The USDA's Animal and Plant Health Inspection Service is requiring all non-negative test results be reported to help track the spread of the virus.

At this point, precautionary steps, such as pasteurization of milk and thorough cooking of eggs and meats, have been recommended. Consumers do not appear to be at risk so long as they exercise these proper food preparation precautions.

The spread of HPAI to dairy cattle and other mammals and the discovery of viral fragments in pasteurized milk should give us all pause. The current outbreak of HPAI moved from Newfoundland in the Northern Hemisphere to Antarctica over the course of approximately one year, and the virus has migrated from birds to various mammals during that time. The HPAI virus is demonstrating its transmissibility, infectivity and ability to mutate. However, it has yet to show that it can be spread from human to human, and it is likely that existing control methods, such as vaccines already in circulation, may be modified to be quickly deployed against HPAI.

Dairy is not the only industry that should be cognizant of the threat of HPAI. Farmers and processors in the pork industry should be extremely vigilant in their biosecurity measures. Pigs present a favorable host environment to various viruses that permits the comingling of influenza viruses along with those that regularly infect humans. That environment presents a particular threat to both pig and human health. Not only dairy cattle but also pigs and hogs, should be monitored closely for any signs of illness. Veterinary assistance should be obtained, and personal protective equipment should be utilized, at the first sign of illness. The U.S. Department of Agriculture and state departments of agriculture as well as extension services are providing guidance on appropriate biosecurity measures, and this would be a good time for everyone in the poultry, dairy and pork industries to revisit their biosecurity measures and increase their level of vigilance.

If you have any questions about HPAI or compliance with the Pennsylvania or USDA orders, please contact attorneys Tim Dietrich, Charmaine Nyman, EmmaRose Strohl or any member of Barley Snyder's Food & Agribusiness Industry Group.

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