

Avian Influenza: The World Remains on High Alert for this Mobile Killer

By Rebecca Sweat

Public health officials around the world remain on alert because of concerns about the prospect of an avian influenza pandemic. This particular strain of avian influenza — known as high pathogenicity H5N1 — has occurred in poultry in Southeast Asia since 1997. H5N1 is a serious threat to the world because it can destroy poultry flocks and because it is “zoonotic,” meaning it can be transmitted between animals and people.

What are your chances of contracting avian flu, and what would an H5N1 outbreak in this country mean for your companion birds? Could your pet bird become infected with H5N1? Could your parrot pass on avian flu to you?

According to Michelle Hawkins, VMD, assistant professor of companion avian and exotic pet medicine at the University of California at Davis, theoretically a parrot infected with H5N1 could pass the virus to people. Because this hasn't happened yet, no one knows the likelihood of such an infection or how serious of a disease it would be. The majority of the birds that contracted H5N1 have been ducks, geese, chickens and turkeys. The virus struck a handful of other species, including pheasants, quail, guinea fowl, flamingoes, swans, hawks and eagles.

Where Does Avian Flu Come From?

Avian influenza is transmitted by direct contact between healthy birds and infected birds, as well as indirect contact with contaminated water, feces, crates, equipment and people whose clothing or shoes have come in contact with the virus. Health officials believe the chickens that contracted H5N1 in Hong Kong in 1997 got the virus from migratory waterfowl that defecated in the chicken coops or drank out of their water troughs. Once the chickens became infected, they passed the virus to people who handled the chickens or cleaned their cages.

A large amount of contaminated materials isn't necessary to create a large-scale infection. One gram of contaminated manure can contain enough of the virus to infect 1 million birds, according to the USDA's Animal and Plant Health Inspection Service (APHIS).

Once some birds become infected, H5N1 can spread to new regions in several ways. One is by migratory waterfowl; not only can wild birds pass the virus to chickens, but the reverse might happen. “It appears that wild birds are picking the virus up from domestic poultry and then flying a certain distance and then moving the virus to new locations,” noted Patrice Klein, DVM, senior staff veterinarian with APHIS, based in Riverdale, Maryland.

A second route is through bird and bird product smuggling. Each year people manage to smuggle live pet birds, live poultry and poultry products into this country. “When they do, the birds are obviously not getting health-checked or quarantined, and some of these birds or products may be coming from regions with H5N1,” Klein noted.

There also can be a more localized or regional movement of the virus via the wet markets that are prevalent in much of the world. “If a person buys an infected bird or just comes in contact with an infected bird while shopping at these markets, the virus may be transported on shoes, clothing or hands to a new location when that person goes home,” Klein said.

How To Prevent Avian Flu

What are the chances of your birds coming in contact with H5N1? “For the pet bird that is kept indoors, the risks are very low if the owners practice good biosecurity to limit the birds' risk of exposure to this virus and other bird diseases,” Klein stated.

On the other hand, she said, “If you keep your birds outside — either as pets in outdoor flights or as breeder birds in aviaries, backyard poultry or domestic waterfowl in open ponds, your birds are at risk of being exposed to wild birds that might be carrying the disease.” Keeping some birds outdoors, such as chickens, could increase the risks of indoor pet birds being exposed to the virus if good biosecurity and sanitation is not practiced, she added.

Good biosecurity is the key to keeping your birds safe. If you do keep your birds outdoors, a solid roof or other protective covering over the top of your aviary prevents wild birds' droppings from landing inside. A screen enclosure on the sides of the aviary is recommended.

If you own backyard chickens or have a pond with ducks or geese, shower and change your clothes before going near your pet birds or their play areas. “You should have a pair of boots and coveralls that you wear when you take care of your poultry,” Hawkins suggested. Keep the boots and coveralls outdoors in a barn, tool shed or garage.

If you have been near other birds or bird owners — such as at a feed store, bird mart, bird club meeting, county fair or farm exhibition — clean and disinfect your car and truck tires, bird cages and equipment with an antiviral disinfectant before coming home. Wear clean clothes, scrub your shoes with disinfectant, and wash your hands thoroughly before handling your birds.

If you’re buying a new bird, quarantine it for at least 30 days — away from the rest of your birds — before putting it in the same flight with the rest of your birds or even in the same room in your house. Buy your birds from a reputable bird breeder or retailer — someone whom you know does not smuggle birds or buy smuggled birds.

The bottom line: Have biosecurity measures in place — whether or not H5N1 avian influenza comes to this country. “You really don’t need to do anything additionally to protect your birds from avian influenza that you shouldn’t already be doing to protect your birds from all the other avian diseases,” Hawkins stressed. “The same things you do to try to prevent your bird’s exposure to West Nile Virus, Exotic Newcastle’s Disease, and psittacosis are the same basic steps you need to take to protect your birds from avian influenza.”

Keep in mind, Hawkins added, that “when you’re taking steps to keep your birds disease-free, you’re also protecting yourself. If your birds don’t have a zoonotic disease, they’re not going to be able to pass one on to you.”