

Questions about avian influenza and migratory birds

Rouge River Bird Observatory

What is bird flu?

Avian influenza, or bird flu, is a virus which occurs in dozens of different subtypes. It is found naturally in wild birds, and only a few of the subtypes cause any health problems for animals or people. The many mild strains are known as "low pathogenic" avian flu viruses.

There are a few strains of two subtypes that are considered "high pathogenic" avian flu viruses, or HPAI. They normally do not occur in wild birds, but arise in poultry. Wild birds can become infected with HPAI through contact with infected poultry, or contaminated food or waste.

The "bird flu" in the news today is HPAI subtype H5N1. It first appeared in Hong Kong in 1997. HPAI H5N1 causes high mortality in domestic poultry. Some humans who have been in close contact with infected poultry have contracted this bird flu; some have died. Currently, HPAI H5N1 is not readily spread to or between humans. The virus would have to mutate in order for this to happen, but it is not known when or if this will occur. The fear that the virus will mutate and be easily spread between humans is what is fueling concerns about a global pandemic.

What kinds of wild birds have tested positive for HPAI H5N1?

Ducks, geese, and other waterbirds are the kinds of wild birds which have most often been found to be infected. This is because they often gather in groups, usually near water or farmland. Because HPAI H5N1 is spread by contact with poultry or feces, these conditions make it easy for the virus to be acquired by these birds.

Fewer than 100 bird species have documented to have had HPAI H5N1, and not all of those represent birds in the wild.

What is the role of migratory birds in the spread of HPAI H5N1?

The role of migratory birds in spread of HPAI H5N1 is not fully understood. Only a very few live wild birds out of hundreds of thousands tested have been found to be carrying HPAI H5N1. Most were found dead, usually near outbreaks in domestic poultry.

It is unclear whether wild birds can carry HPAI H5N1 long distances, especially beyond the incubation period of the virus, which is around three to seven days. This is because HPAI H5N1 appears to be fatal to many wild birds. It is also unknown how easily infected wild birds can pass on the virus to other wild birds.

The geographic spread of HPAI H5N1 does not correlate well with migratory bird routes or seasons. HPAI H5N1 has not been found in areas or at an intensity that might be expected if migratory birds were the main carriers. Most outbreaks of HPAI H5N1 appear to have been spread by the movement of poultry, poultry products, and waste rather than by movements of migratory birds.

Is HPAI H5N1 in the United States?

Various forms of low pathogenic avian influenza have existed in the United States for nearly 100 years. They have not posed a public health threat. HPAI H5N1 has never been found in the United States.

Will migratory birds bring HPAI H5N1 to the United States?

It is possible, but it is more likely the virus will be transported here via poultry or poultry products, or legal or illegal imported wild birds or animals.

There are relatively few bird species which migrate between Europe and Asia and North America. In order for HPAI H5N1 to spread through North America via migratory birds a number of steps would have to take place.

– Infected birds would have to survive long enough to make a long-distance migration to North America, and come in

contact with North American species. It is not known if wild birds can carry HPAI H5N1 long distances, or how long they can live if infected. Nearly every wild bird found to have HPAI H5N1 was found dead.– North American bird species would in turn have to become infected. It is not known if or how easily infected wild birds can pass on the virus to other wild birds.– These newly infected North American species would have to survive weeks or months, until it was time for them to migrate themselves, undergo their migration, and then pass it on to still more birds in order for the virus to spread throughout the continent.

Are migratory birds being monitored for HPAI H5N1 in the U.S.?

Since the 1990s, the U.S. Department of Agriculture has routinely tested for HPAI in birds migrating from Asia to Alaska. More than 12,000 birds have been tested, plus another 4,000 on the eastern part of the continent. All birds tested negative.

Recently, several government agencies announced a plan for stepped-up monitoring for HPAI H5N1 in migratory birds. For 2006, the plan calls for collecting between 75,000 to 100,000 samples from live and dead wild birds, and 50,000 samples of water or feces from high-risk waterfowl habitats across the United States.

Beginning this year, the Rouge River Bird Observatory will be a participant in one of these monitoring programs for avian influenza as part of its on-going bird banding project. Coordinated through the Landbird Migration Monitoring Network of the Americas (LaMMNA), the goal is to learn more about the identity, frequency, and geographic distribution of virus sub-types (there are 144, and each may have different strains) carried by landbirds. The process will take only a few seconds per bird, and involves obtaining a swab that contains cells shed from the intestinal tract.

Do migratory birds represent a health risk?

There have been no cases where a human has contracted HPAI H5N1 from a wild bird. If migratory birds are found to be able to carry and transmit HPAI H5N1, at some point, infected wild birds would have to come into contact with poultry and infect the poultry. Humans would need to come in close contact with infected poultry or contaminated products to get infected themselves. Therefore, given what we know now and in the absence of further virus mutations, migratory birds do not pose a significant human health risk where HPAI H5N1 is concerned.

Should I avoid parks with geese and ducks?

It is not necessary to avoid wild birds. HPAI H5N1 has not been detected in the U.S. There are no reports of humans having contracted HPAI H5N1 from wild birds. You should always use common sense outdoors, and avoid coming in close contact with wild birds, for your safety and theirs. If you come in contact with bird droppings, make sure to clean up with soap and water.

Remember that you should never feed wild ducks and geese. It does not provide proper nutrition, causes the birds to become less fearful and more dependent on humans, and creates overcrowding and situations that favor the spread of diseases such as avian cholera and avian botulism.

Is it safe to keep feeding birds?

Yes, you can continue to feed birds. HPAI H5N1 has not been detected in the U.S. There are no reports of humans having contracted HPAI H5N1 from wild birds. The kinds of birds that visit feeders are highly unlikely to carry HPAI H5N1.

In any case, you should always practice good bird feeding methods. Keep the area around your feeder clean. Outdoors and while wearing gloves, clean and disinfect feeders and birdbaths every other week, using a 10% bleach and water solution. Make sure to rinse thoroughly. Water should be changed in bird baths daily, especially during warm weather. These precautions are always recommended to minimize the risk of more common diseases that may be passed between birds at feeders.

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