House finches 'avoid sick members of their own'

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House finches (pictured) avoid sick members of their own species, scientists announced in a finding that could be useful for tracking the spread of diseases like bird flu that also affects humans.

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Laboratory tests showed that the house finch, a particularly social North American species, was able to tell the difference between sick and healthy fellow birds and tended to avoid those that were unwell.

This was the first time that avoidance of sick individuals, already observed in lobsters and bullfrog tadpoles, has been shown in birds, according to a paper published in the Royal Society journal *Biology Letters*, on Wednesday.

"In addition, we found variation in the immune response of house finches, which means that they vary in their ability to fight off infections," co-author Maxine Zylberberg of the California Academy of Sciences told AFP.

"As it turns out, individuals who have weaker immune responses and therefore are less able to fight off infections, are the ones who most avoid interacting with sick individuals."

This all meant that there were differences between individual birds' susceptibility to disease, the time it would take them to recuperate and their likeliness to pass on the disease.

"These are key factors that help to determine if and when an infectious disease will spread through a group of birds," said Zylberg—and how quickly.

"This becomes particularly important for us in trying to figure out and predict when and how infectious diseases that affect both birds and ourselves ... will spread through wild bird populations and end up in areas where wild birds and humans interact extensively, creating the opportunity for these diseases to cross over from birds to humans."

The H5N1 strain of avian influenza, commonly known as bird flu,

spreads from live birds to humans through direct contact.

It causes fever and breathing problems and has claimed 359 human lives in 15 countries, mainly in Asia and Africa, from 2003 to August of this year, according to the World Health Organisation.

More information: House finches (Carpodacus mexicanus) balance investment in behavioural and immunological defences against pathogens, rsbl.royalsocietypublishing.or … 11/01/rsbl.2012.0856

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