

## CRPS Current Research in **Poultry Science**

## News & Comments Migration of Wild Birds Not Associated with Antibiotic-Resistant Salmonella Strains

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There are many kinds of bacterial food poisoning, but salmonella is among the most common. Symptoms include stomachaches and diarrhea lasting four to seven days

Scientists led by Penn State found that Salmonella often lacks antibacterial genes although many migrating birds carry the bacteria.

Salmonella strains carried by wild birds aren't as dangerous to humans as other strains, scientists have known for many years.

It was previously thought that wild birds are a reserve for Salmonella enterica, but this new study found that wild birds are not chief reservoirs of resistant Salmonella strains. This finding is a key in resolving the concern about the transmission of diseases to humans via migratory birds.

The team found that all the multi-resistant Salmonella enterica isolates were extracted from birds present in the water and raptors, but none came from songbirds.

Moreover, the study found that lineages derived from wild bird isolates were different from those derived from domestic animals. They used a machine learning classifier to attribute genomes to different groups of wild birds. This can improve the identification of host-adapted genomic datasets, thus improving the prediction and facilitating future disease outbreak investigation.

## **KEYWORDS**

salmonella, wild birds, bacterial pathogens, bird migration

