



**National Wildlife Health Center
Wildlife Health Bulletin 2018-04 UPDATE**

**Update: Avian Paramyxovirus-1 in Double-Crested Cormorants
and Eurasian Collared Doves**

To: Natural Resource/Conservation Managers
From: Dr. Jonathan Sleeman, Center Director, USGS National Wildlife Health Center
Date: September 25, 2018

We are providing an update to Wildlife Health Bulletin 2018-04, Avian Paramyxovirus-1 in Double-Crested Cormorants and Eurasian Collared Doves, originally released on August 31, 2018.

Update: Three simultaneous events highlight the diversity of avian paramyxovirus-1

Different strains of avian paramyxovirus-1 (APMV-1) caused the outbreaks in backyard poultry in California, Eurasian collared doves (*Streptopelia decaocto*) in Central plain states, and double crested cormorants (*Phalacrocorax auratus*) in the Great Lakes region. Detailed sequence analysis showed that the outbreaks were caused by distinctly different phylogenetic varieties of APMV-1.

Characterization of the viruses

Detailed characterization of APMV-1 strains isolated from double-crested cormorants that died in the Great Lakes and Northeastern US, and those from Eurasian collared doves that died in Texas, Utah and Washington have now been completed at the US Department of Agriculture (USDA) 's APHIS Veterinary Services National Veterinary Services Laboratories. The strains in double-crested cormorants are virulent Newcastle Disease virus (vNDV) and are closely related to other vNDV strains from cormorants. The strains in Eurasian collared doves are pigeon paramyxovirus-1 (PPMV-1) that are closely related to previously known strains of PPMV-1 from pigeons and doves. Both the cormorant vNDV and columbid PPMV-1 strains are considered species-adapted to their respective hosts and are distinct from the vNDV that has been identified in backyard poultry from California in 2018.

We thank Dr. Mia Torchetti and the USDA's National Veterinary Services Laboratories for ongoing support and collaboration in the investigation of these wildlife mortality events.

Disease Investigation Services

To request diagnostic services or report wildlife mortality, please contact the NWHC at **608-270-2480** or by email at NWHC-epi@usgs.gov, and a field epidemiologist will be available to discuss the case. To report wildlife mortality events in Hawaii or Pacific Island territories, please contact the Honolulu Field Station at 808-792-9520 or email Thierry Work at thierry_work@usgs.gov.

Further information about our services can be found at www.usgs.gov/nwhc/services. To learn more about submitting samples and reporting events, go to www.usgs.gov/nwhc/submit and check out the [Wildlife Mortality Reporting and Diagnostic Services Request Worksheet](#).

To see past Wildlife Health Bulletins, click [here](#).

WILDLIFE HEALTH BULLETINS are distributed to natural resource/conservation agencies to provide and promote information exchange about significant wildlife health threats. If you would like to be added to or removed from the mailing list for these bulletins, please contact Natalie Nguyen at 608-270-2416 or e-mail: nwhcoutreachdb@usgs.gov.