

# Veterinary advisory: Newcastle disease (March 27, 2023)

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## Current situation

On March 13, 2023, the Animal Health Laboratory reported a positive detection of avian paramyxovirus 1 (APMV-1) at a premises housing racing pigeons in the united counties of Stormont, Dundas and Glengarry, Ontario. The flock was being tested for export purposes and was not showing any signs of illness.

On March 27, 2023, the National Centre for Foreign Animal Disease in Winnipeg reported that secondary testing confirmed it was a velogenic strain of APMV-1, which causes Newcastle disease in domestic poultry and can widely affect most bird species.

Newcastle Disease is not a food safety or significant public health concern for healthy people not in routine contact with infected birds.

## Clinical signs

Newcastle disease is a highly contagious disease in many species of domestic poultry, exotic and wild birds. The clinical presentation of the disease depends on a variety of factors including species, age, immunization status/history, subtype and in some cases can resemble high pathogenicity avian influenza. Clinical signs include respiratory distress, coughing and sneezing, diarrhea and neurological signs including tremors and paralysis. The mortality rate varies depending on the subtype.

## Diagnosis

Newcastle disease is a federally reportable disease under the federal *Health of Animals Act*. Attending veterinarians concerned about possible cases of Newcastle disease should contact their [local district Canadian Food Inspection Agency \(CFIA\) office](#) for further guidance.

Newcastle disease is also an immediately notifiable hazard by laboratories to the Office of the Chief Veterinarian for Ontario (OCVO) under the provincial *Animal Health Act*. Attending veterinarians with

questions related to poultry health may contact a Ministry of Agriculture, Food and Rural Affairs (OMAFRA) veterinarian through the Agricultural Information Contact Centre at 1-877-424-1300.

## Prevention

Adult cormorants in Canada play an important role in the spread of Newcastle disease virus APMV-1; they are the main reservoir for the disease and do not show clinical signs. In Ontario, the Canadian Wildlife Health Cooperative (CWHC) routinely detects Newcastle disease virus APMV-1 in double-crested cormorants (DCCO) and feral European rock doves.

Infected birds showing clinical signs are active reservoirs for the disease and may shed the virus in their feces, contaminating the environment.

The disease spreads rapidly among birds in close contact and can survive for days in:

- litter
- feed
- water
- soil
- dead birds
- eggs
- feathers

Newcastle disease can be introduced to a barn via poor biosecurity practices and is most often transmitted from one infected flock to another by movement of infected birds or contaminated equipment or people. Implementing and adhering to biosecurity best management practices is key to preventing the introduction and spread of the disease.

Commercial breeder and layer chickens are routinely vaccinated for APMV-1 and therefore have a lower risk of infection. Birds with outdoor access have higher risk of contracting the disease and they should not share areas with wild birds, including feral pigeons. Producers and flock owners are also advised to ensure areas used for outdoor access, including ponds or open feeders, do not attract wild birds, as these areas may become contaminated with wild bird droppings and cause further spread of disease.

## For additional information

### CFIA – Newcastle Disease

[Newcastle Disease - Fact Sheet](#)

### OIE – Newcastle Disease

[Newcastle Disease](#)

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1-877-424-1300

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