



Avian Paramyxovirus-1 (APMV-1)



What is Avian Paramyxovirus?

Avian Paramyxoviruses (also referred to as avian avulaviruses) describe a genus of RNA viruses that cause disease in varying severity in both domestic and wild birds worldwide. APMV-1 refers to the serotype most commonly associated with disease in pigeons, doves and double-crested cormorants in North American wildlife. In Wyoming, wild species most affected appear to be pigeons, Eurasian collared doves and native Mourning doves. These “pigeon paramyxovirus” outbreaks first began in Florida in 2001 in introduced Eurasian collared doves and now routinely occur across the western states.

Infection with the virulent form of APMV-1 in domestic poultry is called Newcastle Disease. This is a reportable disease and remains an economically important poultry disease with global distribution.

Avian paramyxovirus transmission occurs primarily through direct contact via exhaled air, saliva, nasal secretions or feces and from contaminated environments. The virus is shed throughout the infectious stages and can survive for months outside the body. Outbreaks can be associated with high morbidity and mortality in affected populations.

How Does Avian Paramyxovirus Affect Me?

Reports of zoonotic transmission are extremely rare. The more virulent strains, like those linked to Newcastle Disease, have been associated with temporary conjunctivitis (pink eye) or flu-like symptoms after significant exposure events.

What are the clinical signs of animals with Avian Paramyxovirus infection?

Clinical signs are highly variable. Some birds may be asymptomatic (show no outward signs), while others may succumb to rapid death. Affected animals may exhibit weight loss, diarrhea, nasal discharge, respiratory distress, or neurological symptoms. These may include weakness, partial or complete paralysis of the wings and legs, incoordination, body tremors or head twisting.

How can you help to stop the spread of Avian Paramyxovirus?

If you suspect a local outbreak, please take down artificial feeding sources and disinfect feeders and waterers to prevent congregation and spreading of the virus. Disinfect with a 10% bleach solution followed by a thorough rinsing with water. Feeders should remain down for 30 days to help break the transmission cycle.

For additional information on Avian Paramyxovirus, general recommendations for backyard bird health and wildlife disease distribution maps please visit: <https://wgfd.wyo.gov/wyoming-wildlife/wildlife-disease-and-health> or contact the WGFD Wildlife Health Laboratory at 307-745-5865.