Psittacine Beak and Feather Disease

Animal Health Management

March 12, 2019: Veterinarians who work with exotic birds, as well as the Chief Veterinary Office (CVO), have observed an increase in reporting of PBFD in Winnipeg over the last three months. The spread of the disease may be linked to bird movements from one or two exotic bird collectors. The following information is meant to assist veterinarians and bird owners who may be concerned about the spread of PBFD.

What is PBFD?

Psittacine beak and feather disease (PBFD) is caused by a psittacine circovirus. This condition can cause damage to the beak, feathers and nails and is a potentially deadly virus, common to parrots. The virus does not affect humans or mammals.

Who are the susceptible hosts?

There are two strains of the virus, type one and type two.

- Type 1 is most common in cockatoos, lovebirds, African grey parrots, ring necked parakeets and Eclectus parrots. All parrots can become infected, although those listed (above) are found to be more susceptible.
- Type 2 strain is common in lories, lorikeets and lovebirds.

How is PBFD transmitted?

The virus can be shed from parents to offspring or between infected birds housed in the same environment. Ingestion and inhalation of air or food contaminated by feather and/or fecal dust is the most common transmission route. The virus is very stable in the environment and is resistant to common disinfectants.

What are the effects?

The age of a bird at infection is an important factor in susceptibility and severity of the disease, allowing for three forms:

1. Neonates are the most susceptible and have a very fast disease progression, leading to death.
2. Young fledging birds are susceptible during initial feather formation and may take several days before showing symptoms.
3. Birds undergoing their first molt (aged six to12 months) may be less susceptible, but if infected, could take months to show signs. During this time, they can spread the disease to other birds.

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What are the symptoms?

One of the first signs of note is destruction of powder down (fine powder produced for feather health maintenance) and contour feathers. After this, the beak will appear glossy since the powder is responsible for the matte appearance.

Very young birds will suffer from blood poisoning, pneumonia and sudden death.

Some fledglings may be capable to fight off or delay the infection. If infected, they may recover or develop a severe form of the disease, with death in one to two weeks, or they may become chronically infected (see below).

For birds undergoing their first molt, signs can progress from months to years, including abnormal feather and beak growth, feather loss, a suppressed immune system and eventually death. Chronically infected birds attained from rescues and kept as pets or breeding birds are a significant risk to other birds they come in contact with.

How do you diagnose PBFD?

If signs are apparent seek out your veterinarian where a combination of testing can be performed using blood samples, mouth swabs and cloaca swabs.

Is there treatment?

At this time, there is no treatment, aside from supportive care in a stress-free environment. If a secondary infection occurs due to a weakened immune system, visit your veterinarian.

Euthanasia is recommended to prevent disease spread and to eliminate suffering.

How do you prevent PBFD?

Work with your veterinarian to make sure you understand the risk and have knowledge of the disease status of your birds and any birds they may come in contact with. A veterinarian has an important role regarding promoting health, routine testing and surveillance. All newcomers should be put into a two-month quarantine. It is highly advised that any susceptible birds be brought to a vet to establish a disease status. If birds are found to be infected, isolation away from uninfected birds is critical.

If the disease is suspected, the caretaker should have no contact with outside birds.
Clothing, body surfaces, bird carriers, feeding and nest materials that may be contaminated can be modes of transmission and should be properly cleaned or disposed of.

Contact us

For more information, contact your veterinarian or the Chief Veterinary Office at chiefveterinaryoffice@gov.mb.ca or call **204-945-7684** in Winnipeg.

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