

# LYMPHOPROLIFERATIVE DISEASE

Office of Fish and Wildlife Health and Forensics



### Introduction

Lymphoproliferative disease (LPDV) is a caused by a type-C retrovirus that can cause tumors in wild turkeys. It is known to affect wild turkeys throughout 18 states. LPDV infected turkeys can carry the virus for life and be asymptomatic. The effect of this virus at a population level is unknown.

# **Species Affected**

LPDV affects wild turkeys. It is likely this virus is limited to the order of Galliformes. LPDV can also affect domestic chickens and turkey flocks.

# **Clinical Signs**

The age of the turkey when infected with LPDV has been shown to play a role in the likelihood of developing tumors. Turkeys that were infected at 4 weeks old are more likely to develop a tumor whereas turkeys infected at 1 day old are less likely. It is possible for turkeys to remain asymptomatic. In wild turkeys, clinical signs can include drooping wing, head tremors, circling and is often associated with skin nodules on the head, neck, and feet.

Organs may also be clinically affected, specifically the spleen. The spleen will be enlarged and a white to pale pink color. The liver can also present with variably sized, pale lesions that are caused by abnormal white blood cells. The thymus, pancreas, kidney, gonads, lungs, and peripheral nerves can also be affected.

# Transmission

The transmission of LPDV happens through direct contact with other infected turkeys.

#### Diagnosis

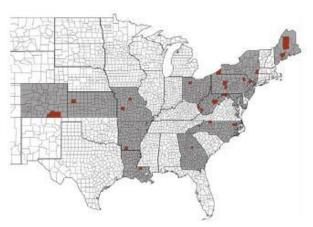
PCR testing is required to detect the virus in whole blood or tissue. Skin nodules can be tested with the use of histology to look rule out avian pox.

# Epidemiology

LPDV was first documented in the United States in Arkansas in 2009. Since then. LPDV is present in the 18 states that make up the natural habitat range of the eastern wild turkey subspecies (Meleagris gallopavo silvestris). Unlike in the UK, Austria, the Netherlands, and Israel, LPDV is endemic to the wild turkey population in the US. According to the NYS Wildlife Health Program, 60-80% of adult wild turkeys in New York are carrying LDPV. It is not known what the impact of LPDV is on the wild population, but severe disease and major mortalities are rare. The percentage of the population that is infected in NJ is not yet known, however, studies are ongoing.

# What to Do / Who to Contact

Because this disease transmits through direct contact and turkeys are flocking animals, it is advised not to encourage more flocking by feeding wild turkeys. If you suspect a wild turkey has LPDV please contact 1-877-WARN-DEP (1-877-927-6337).



Map of LPDV range in US. Map courtesy of Southeastern Cooperative Wildlife Disease Study.

# FAQ

#### Can I get LPDV?

No LPDV is not transmissible to humans.

# **Additional Information**

Penn Vet | Fact Sheet Detail (upenn.edu)

Molecular Surveillance for Lymphoproliferative Disease Virus in Wild Turkeys (Meleagris gallopavo) from the Eastern United States | PLOS ONE

Lymphoproliferative disease of turkeys. II. Experimental transmission and aetiology - PubMed (nih.gov)

Lymphoproliferative disease | Cornell Wildlife Health Lab

Lymphoproliferative Disease Virus (LPDV) | Missouri Department of Conservation (mo.gov)

Cover Image from: Southeastern Cooperative Wildlife Disease Study







