

# Infectious Laryngotracheitis Virus (ILT)

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## What is ILT?

Infectious Laryngotracheitis virus is a herpes virus that causes respiratory disease in chickens. ILT is a reportable disease in North Carolina and some other states. Flocks suspected of having ILT must be reported to the North Carolina Department of Agriculture and Consumer Services' (NCDA&CS) Veterinary Division.

## Where does ILT come from?

Though ILT can be found in chickens throughout the world, it does not survive for extended periods outside the bird in the environment. ILT is susceptible to sunlight and most commonly-used disinfectants. Once infected, chickens become life-long carriers of ILT and can shed the virus during times of stress. Chickens are considered to be the source of infection for other chickens. Virus can be transmitted over short periods of time on equipment, boots and coveralls.

## What clinical signs are present in ILT-infected birds?

Birds infected with ILT initially exhibit signs similar to other respiratory diseases, including: wet irritated eyes (Fig.1), sneezing, nasal discharge, failure to thrive, decreased growth, and decreased egg production. As ILT progresses the clinical signs may become much worse including: difficulty breathing, bloody discharge from the nose and mouth, gasping (Fig.2), coughing, and expectoration of bloody mucus. Birds will shake their heads to clear the mucus from their nose and mouth, which results in blood stained mucus on the feathers of many birds in the flock.



Figure 1. Wet irritated eyes



**Figure 2. Open-mouth breathing or gasping**

### **How long does ILT last?**

The course of the disease varies with the severity of the lesions, but most birds recover in 10-14 days.

### **Will my birds die from ILT?**

Again, the severity of the lesions is related to the mortality seen in flocks with ILT. Mild forms of the disease result in very low mortality (0.1-2%). Severe forms of the disease result in variable mortality (5-70%) with average being 10-20%.

### **How is ILT diagnosed?**

In ILT infections, clinical signs alone should make you highly suspicious that you are dealing with ILT. Even so, as with any disease, you should submit birds to the diagnostic laboratory in your area for confirmation of the diagnosis. A post-mortem examination of affected birds will generally reveal blood in the bird's airway. The trachea or windpipe is often very bloody and may be partially clogged with mucus and blood (Fig. 3). Swabs of the trachea will be used to attempt to grow the virus. Other diagnostic tests may be performed to confirm that your flock has ILT.



**Figure 3. Trachea filled with blood and mucus**

## **What happens if my flock has ILT?**

If you live in North Carolina, where ILT is a reportable disease, your farm will be quarantined by the NCDA&CS. A quarantine means that you must have a permit to move birds onto or off your farm until the quarantine is lifted. Your birds will be sent to market as quickly as possible with travel to market via routes determined by the Department of Agriculture. Lifting of the quarantine is accomplished when your farm tests negative for ILT two times in a row with the tests being performed thirty days apart. Before the first of these tests, your farm must be cleaned and disinfected

## **Can people get ILT?**

No, human health is not affected by ILT.

## **Is it safe to eat meat and eggs from birds with ILT?**

Yes, because humans are not affected by ILT, and because the virus is destroyed by cooking, it is safe to eat poultry products from infected birds.

## **How can I prevent ILT from infecting my flock?**

Preventing the introduction of ILT and other viruses onto your farm should be the goal of all producers. Preventing the introduction of ILT into your flock is not difficult to do if you follow some “common sense” guidelines.

- **Avoid moving any birds onto or off your farm during an ILT outbreak.**
- **Do not visit other poultry producers during an ILT outbreak.**

Dr. Bob Hillman, Executive Director of the Texas Animal Health Commission recommends simple biosecurity measures that can be taken to help protect flocks:

1. **“Keep a spare pair.”** Buy a pair of inexpensive rubber boots, and wear them only on your own premises, to avoid ‘tracking in’ disease.
2. **“Give germs the brush off!”** Use a long-handled brush to scrape off manure, mud or debris from tires, equipment or boots, then disinfect.
3. **“Disinfection prevents infection!”** Mix a solution of three parts bleach to two parts water, and use it liberally to clean rubber boots and equipment brought onto your farm. If visitors don’t want their vehicle tires sprayed with disinfectant, ask them to park outside your gate.
4. **“Make visitors take cover.”** Don’t be shy about asking visitors to disinfect their footwear -- or better yet, provide guests with disposable shoe covers, or footwear worn only on your place.

**If you live in North Carolina and think your flock has ILT, call NCDA&CS at (919) 733-7601**