



Infectious Laryngotracheitis

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What is ILT?

Infectious laryngotracheitis, also known as LT or ILT, has often caused disease outbreaks at fairs in Michigan. ILT is a viral disease of chickens that can also cause disease in peafowl and pheasants. It typically results in a drastic death loss in a flock. ILT is easily spread by birds that are experiencing the disease, those that have survived the disease, birds that have been vaccinated with a live vaccine (other than a pox-vectored vaccine), people, supplies (such as egg cartons) and equipment. Birds that have recovered from ILT infection or were vaccinated with a live ILT vaccine are considered to be infected for the rest of their lives.

At fairs, birds that have been vaccinated with a live vaccine are usually housed in the same barns with birds that have not been vaccinated for ILT. This creates a problem. The virus that causes ILT behaves like the cold sore virus of humans (*Herpes simplex 1*). (Don't worry — you can't give chickens the cold sore virus, nor can you get ILT from your chickens.) With the human cold sore virus, people are exposed to that virus when they are children. The cold sore virus does not cause problems until people go through a stressful time, such as a fever. When people are under stress, their immune systems cannot continue to fight the virus and cold sores develop.

A similar thing happens with the ILT virus in chickens. When chickens survive infection or are vaccinated with a live ILT vaccine, the virus hides in the chicken's body until it is stressed. At fair time, chickens are removed from their home environment, put in a motor vehicle, transported to a fair and mixed with other chickens that are strangers to them. All of those things are extremely stressful to a chicken. With that stress, the vaccinated birds do not get sick, but the virus is spread to birds that have not been vaccinated. Non-vaccinated birds get sick, have difficulty breathing and cough, sometimes coughing up blood, and most will die from the infection. ILT is difficult to detect in healthy chickens that may carry the virus and in birds vaccinated with live ILT vaccine, so it can cause lots of problems at fairs.

In Michigan, this disease is a reportable disease. This means that, if you suspect ILT, you must call the Michigan Department of Agriculture and Rural Development's State Veterinarian's Office.

Shots

In some counties in Michigan, this disease has caused such a problem that they no longer have chickens at their fairs. This does not have to happen in your county if people would follow rules in consideration of other people's chickens. Fairs could choose not to allow birds that have been vaccinated with live ILT vaccine to be entered in the fair. This choice is hard to enforce because it depends on people's honesty — you cannot tell a vaccinated bird from a non-vaccinated bird just by looking at it. An alternative to the regular live ILT vaccine is a recently developed ILT vaccine that does not have the entire virus in it. Scientists have been able to take a small part of the ILT virus, which protects chickens from the disease, and put it into a live pox virus. This new vaccine is referred to as a pox-vectored vaccine. When you use the pox-vectored vaccine to vaccinate your chickens, they get vaccinated for two or more diseases at the same time — ILT, pox and/or avian encephalomyelitis (AE) diseases. Currently, there are only two pox-vectored ILT vaccines on the market: Vectormune®FP LT and Vectormune®FP LT+AE. Both vaccines are made by Ceva USA. There is no live ILT virus in these vaccines, so there is no danger of it spreading to other, non-vaccinated chickens.

ILT can easily spread from small flocks to commercial flocks. If that happens, it would not be unusual for more than 1,000 chickens to die in a day from this disease in a flock of 100,000 chickens. So be a good neighbor and don't vaccinate for ILT unless you use pox-vectored ILT vaccine.

Laws

ILT is a reportable disease in Michigan. That means that anyone who suspects poultry may be infected with this disease and/or any laboratory that diagnoses ILT in a bird must immediately report that suspicion or diagnosis to the



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Michigan Department of Agriculture and Rural Development (MDARD). Also, it is against state law to use the ILT vaccine (except pox-vectored vaccines) or import ILT-vaccinated birds into the state without prior permission from the state veterinarian.

Why is ILT a reportable disease? ILT poses a significant threat to poultry flocks in Michigan. In addition, the symptoms of ILT may be confused with those of other avian diseases of concern, such as influenza and Exotic Newcastle Disease, so it is important to confirm what is causing the illness. When MDARD is notified of a case, a veterinarian will be sent to the farm to determine the best course of action to prevent the spread of the disease to other birds. This may include quarantine of the birds or, in rare cases, depopulation of the farm if there is a significant threat of the disease spreading.

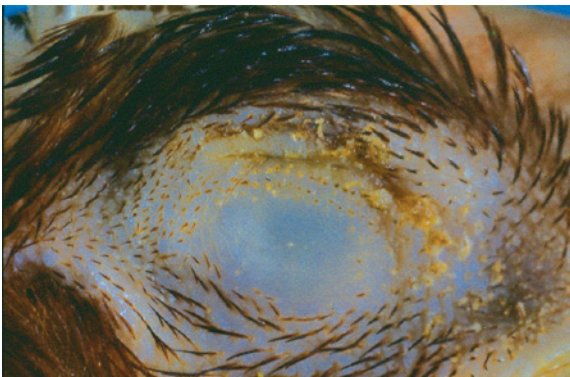
All poultry owners in Michigan have a responsibility to keep

their birds healthy and to use sound biosecurity practices that prevent disease spread to other birds. These practices include taking only healthy birds to shows or exhibitions, using separate clothing or boots and coveralls when working with the flock, limiting the number of visitors to the farm, keeping equipment and bird areas clean, and not sharing equipment between farms, and never wearing barn clothes out in public.

Contact for more information

For more information, you may call Dr. R. M. Fulton at 517-353-3701. Dr. Fulton is an avian pathologist at the Michigan State University Diagnostic Center for Population and Animal Health. If you have questions or suspect that your birds may have a reportable disease, please contact MDARD at 517-373-1077 or after hours at 517-373-0440.

ILT virus can cause some of the problems listed below.



Crusts on the eyelids caused by ILT infection.



Chickens with ILT often extend their head and open their mouth to breathe in. Notice dried blood in this bird's mouth and on its feathers.



Notice how the yellow material (arrow) almost blocks the opening to the wind pipe (trachea).



Blood in the trachea of ILT-infected chicken.

Photos courtesy of R. M. Fulton, D.V.M., Ph.D., Michigan State University