



STATE OF WASHINGTON

DEPARTMENT OF AGRICULTURE

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Infectious Laryngotracheitis Fact Sheet for Small Poultry Flocks

From the State Veterinarian

Fair Poultry Superintendents

Please read this important information about infectious laryngotracheitis (ILT) and share it with poultry exhibitors in advance of upcoming fairs and exhibitions. ILT is highly contagious and can spread rapidly where birds congregate. Please check the health of birds at entry and during exhibition; encourage exhibitors to continue to monitor their birds for signs of illness after the fair, too. Thank you for doing your part to safeguard the health of poultry in Washington State.

Introduction

Infectious laryngotracheitis (ILT) is a highly contagious respiratory disease of chickens caused by a herpes virus. A natural occurring field strain of ILT was first described in chickens in 1925. In Washington State, a vaccine-like strain of ILT was diagnosed in two commercial and one backyard flock in 2009. The disease has since been found in backyard, small production, and commercial flocks in 2014, 2018, 2019, and/or 2021. These flocks were either depopulated or harvested to contain the outbreaks.

Species affected

Chickens are the main host for ILT, but it can also affect pheasants, peafowl, and turkeys. Humans are not at risk.

Signs of illness

Birds show signs of mild to severe illness 6 to 14 days after exposure to the virus. Most signs reflect respiratory distress and general ill health:

- Difficulty breathing
- Coughing
- Sneezing
- Watery eyes
- Swollen sinuses
- Nasal discharge
- Blood-tinged mucus
- Lethargy
- Decreased appetite
- Decreased egg production
- Increased death rates

Transmission

Chickens recovered from ILT carry the virus forever and can shed it when stressed, such as at a show. The virus spreads when discharges from infected birds contact the respiratory tract, eyes, or mouths of susceptible birds. The virus also spreads via contaminated footwear, equipment, tools, clothing, manure, and infected carcasses; it can also be airborne for hundreds of feet.

Treatment

There is no specific treatment for ILT. Pet birds can be given symptomatic care but must be isolated from other birds and rigorous biosecurity measures must be enacted to prevent spread of the virus to other birds.

Prevention

The best way to prevent ILT is to keep a closed flock and not go to shows. This is contrary to the success of educational agricultural exhibitions, though. For those willing to accept increased risk of disease exposure, prevention must focus on effective biosecurity practices and, perhaps, vaccination.

There are three types of ILT vaccines: tissue culture origin (TCO), recombinant ILT (for hatcheries), and chicken embryo origin (CEO). The Washington State Department of Agriculture (WSDA) recommends the following:

- Restrict poultry from showing if they have been infected with ILT in the past 24 months or been vaccinated with the CEO vaccine. Poultry vaccinated with the CEO vaccine can shed the virus when stressed, resulting in other birds becoming infected.
- If owners choose to vaccinate their birds for ILT, WSDA recommends they use the TCO vaccine. However, birds recently vaccinated with the TCO vaccine can infect non-vaccinated birds with ILT. Therefore, do not admit poultry for show if they have been vaccinated with the TCO vaccine 30 days or less prior to the exhibition.

Biosecurity measures

- Thoroughly clean and disinfect cages before placing birds in them.
- Do not admit birds to a show if they display any signs of illness.
- Do not intermix birds of different ages; keep young birds away from mature birds.
- Provide as much space between birds as possible.
- Do not share equipment between birds and/or exhibitors.
- If cage ventilation will still be adequate, consider solid dividers between adjacent cages.
- Do not let the manure, water, or feed from upper cages fall into lower cages.
- Through signage and instruction, educate exhibitors about handwashing: wash before and after handling birds.
- Provide gel hand sanitizer for judges to use between birds.
- Encourage each exhibitor to bring his/her/their own carpet square to use during classes.
- Monitor bird health throughout the fair and have the fair veterinarian examine birds showing signs of illness; dismiss them promptly if indicated.
- Remind exhibitors to keep show birds separate from the home flock for 30 days after returning from an exhibition and do home flock chores first. Watch returning birds closely for signs of illness. Use separate footwear, clothing, and equipment for the two groups; wash hands between groups.

Thorough cleaning and disinfection are important steps to eliminate the ILT virus and other infectious diseases. The ILT virus is susceptible to disinfectants with chlorine-releasing agents (such as bleach), iodophors, and quaternary ammonium compounds. A veterinarian can help select the most appropriate disinfectant. Follow these steps for effective disinfection:

- Remove all visible debris (manure, bedding, dirt, feathers, feed, etc.).
- Thoroughly clean all surfaces with soap and water.
- Rinse well and let dry.
- Apply an appropriate disinfectant at the proper concentration for the recommended contact time.
- Rinse and let dry before using equipment or restocking premises with birds.

Carcasses of birds that died due to ILT are a source of infection for other birds. Proper and legal dead bird disposal methods may include burial, incineration, composting, or landfill disposal, depending on local regulations. Large commercial plastic bags used to ensile livestock forage are an effective way to compost carcasses on site and reduce disease transmission. Instructions for composting carcasses can be found in the WSDA Livestock Disposal Manual at <https://cms.agr.wa.gov/WSDAKentico/Imported/LivestockDisposalManual122014.pdf?/LivestockDisposalManual122014.pdf>.

If ILT has been confirmed on a farm or at a show, it is best to keep manure on site. Cover it during transport if it must leave the premise. Enhanced biosecurity must be used to prevent the spread of infection during transport.

What to do if ILT is suspected at a show or on a premise?

- Contact local veterinarians, the WSDA Avian Health Program (509-607-4974) or Washington State University's Avian Health and Food Safety Laboratory (253-445-4537).
- After emptying an infected poultry barn, turn off the fans and heat to 100°F for three days to kill the ILT virus. Wait at least three weeks after heating, cleaning, and disinfecting before re-stocking birds.
- Notify all poultry producers who visited the premise in the 14 days prior to an outbreak.
- Change clothing and footwear and wash hands between different barns or coops.
- Do not wear farm clothing or footwear off the farm.
- Prevent people from visiting infected coops or barn.
- If possible, have a designated person caring for these birds and no others.
- Avoid visiting other poultry farms.

Conclusion

Because ILT is a highly contagious disease of chickens and can cause widespread illness and death, it is a serious threat to pet, small scale, and commercial flock owners. Prevention steps include enacting effective biosecurity steps daily, monitoring birds closely for signs of illness, possible vaccination, and having close contact with knowledgeable veterinarians. Show birds are at even greater risk of infection due to increased stress, so fair poultry superintendents must keep this and other contagious diseases in mind when managing poultry exhibitions.

If you have questions regarding avian health, please contact the Washington state veterinarian's office at 360-902-1878 or avhealth@agr.wa.gov or your local veterinarian.

CRITICAL ADVICE FOR EXHIBITORS

- Only take birds to the fair you are willing to euthanize if they become infected with ILT.
- Only use Tissue Culture Origin or Recombinant ILT vaccines. ***Do NOT use CEO ILT vaccine.***
- Keep birds returning from fairs isolated from the home flock for 30 days. Perform home flock chores first. Use separate equipment, footwear, and clothing between these groups. Wash hands between groups. Clean and disinfect equipment.

Revised Code of Washington (RCW) 16.36.082: Infected or exposed animals—Unlawful to transfer or expose other animals.

It is unlawful for any person with an animal having any contagious, communicable, or infectious disease to knowingly stable the animal or allow the animal to be stabled in any barn with other animals without notifying the other owners.

Additional Resources

- WSDA Avian Health Program
<https://agr.wa.gov/departments/animals-livestock-and-pets/avian-health>
- USDA Avian Health resources
<https://tinyurl.com/y8cegflb>
- Washington State University, Avian Health & Food Safety Laboratory
<https://waddl.vetmed.wsu.edu/avian>
- Merck Veterinary Manual
<https://www.merckvetmanual.com/poultry/infectious-laryngotracheitis/overview-of-infectious-laryngotracheitis-in-poultry>
- Cornell University Infectious Laryngotracheitis
https://partnersah.vet.cornell.edu/avian-atlas/#/disease/Infectious_Laryngotracheitis