



LT-IVAX®: Spread Safety Study

Four-week-old SPF leghorns were eyedrop-vaccinated with LT-IVAX vaccine and immediately non-vaccinated contact control birds were placed with them in the same house. Then, every two weeks for 10 weeks, the birds were bled and LT ELISA serology

performed. At the end of 10 weeks, the birds were LT-challenged.

Results indicated that the LT-IVAX virus did not spread to the contact control birds as measured by both, serology and challenge.

Test Animals And Materials:

- Thirty five (35) chicks 4-weeks old same hatch and source
- Dropper tips
- Intratracheal inoculation needle
- Forceps, curved
- LT-IVAX vaccine (Schering-Plough)
- Fowl Laryngotracheitis Challenge Virus (NVSL)
- Tryptose Phosphate Broth, 9ml

Method:

Thirty-five SPF birds were used in this study, fifteen birds were vaccinated via the eye at four weeks of age and placed in hut #50. Five nonvaccinated birds were also housed in hut #50 to serve as the contact controls. Fifteen nonvaccinated birds were placed into hut #49 to serve as the negative control group. All birds were bled on two week intervals until they reached the age of fourteen weeks, and then challenged intratracheally with 0.2ml LT Challenge virus Lot #73-6 (NVSL), and monitored for signs of fowl laryngotracheitis.

Results:

A summary of this data is contained in the following table. Table #1 shows the positive vs negative results using the histograms.

Summary:

Both the negative control group and the contact control group showed no antibody response measured by the KPL ELISA test kits. The challenge results confirmed the fact that the contact controls did not seroconvert because of exposure to vaccinated birds.

LT ELISA Serology Weeks Post Vaccinated

GROUPS	WEEKS POST VACCINATED					
	0	2	4	6	8	10
VAC. (+)	0%	0%	27%	60%	73%	53%
CONTACTS (+)	0%	0%	0%	0	0%	0%
NONVAC. (+)	0%	0%	0%	0	0%	0%

Challenge Results

- VACCINATES: 0/15 showed clinical signs of LT-Virus
- CONTACT CONTROLS: 3/5 died within five days post-challenge, the remaining birds showed clinical signs of LT-Virus infection.
- NONVACCINATES: 12/15 died within five days post-challenge, the remaining birds showed clinical signs of LT-Virus infection.

[Innovative Solutions in Poultry Health]

