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Dr Hall - for your info + file

TEXAS A&M UNIVERSITY
COLLEGE OF VETERINARY MEDICINE
College Station, Texas 77843

*Department of*
VETERINARY MICROBIOLOGY AND PARASITOLOGY
MICROBIOLOGY (713) 845-5941
PARASITOLOGY (713) 845-2851

October 11, 1979

R.A. Bankowski
University of California, Davis
Department of Epidemiology
and Preventive Medicine
Davis, California 95616

Dear Ray:

Enclosed is a report on influenza in turkeys in Texas. A copy is also being sent to Dr. Pomeroy as he requested.

Ray, Mr. Bob Baros recently participated in Committee and Board Meetings of the Southeastern Poultry and Egg Association where industry concern for the present status of plans should exotic Newcastle (VVND) gain entrance to the commercial industry were expressed. He suggested and I agree that this should be discussed at our committee meeting in San Diego. Please put this on the agenda for the Transmissable Diseases of Poultry Committee. This topic is related to the proposed resolution I sent you earlier on the importation of exotic birds.

The influenza break in Texas is an example of why I suggested that our committee address the definition of "fowl plague". Do you have this scheduled for the agenda?

Looking forward to seeing you in San Diego.

Sincerely,

L.C. Grumbles, DVM
Professor

LCG:sjp

CC Mr. Baros

Enclosure

# Avian Influenza--A Report on Experiences with Turkeys in Texas in 1979.

## History of Incidence

Influenza occurred in four turkey flocks in Texas in 1979. These four flocks were located on two premises and two flocks on each premises were infected.

The first flock (flock 1) disgnosed was submitted to the laboratory on March 9, 1979 and the diagnosis was confirmed by the isolation and identification of influenza virus. The second flock (flock 2) on the same premises was diagnosed by serologic tests on March 21, 1979.

The third (flock 3) and fourth (flock 4) were owned by a different organization and were over 100 miles from the premises where flock 1 and 2 were located. Birds from these 2 flocks were submitted to the laboratory on April 9, and April 19, 1979. The diagnosis in flock 3 was by serologic procedures and in flock 4 was confirmed by virus isolation.

## Effects on Flock

Flock 1 was a 11,000 bird flock of breeder hens that were 37 weeks old and flock 2 was a 6,000 bird flock of 35 week old breeders. Morbidity in these two flocks was high but the mortality was insignificant. Egg production was affected. The production in flock 1 dropped about 20% then returned to about an "average" rate for the rest of the season. Flock 2 experienced about a 25% drop in egg production and never returned to an average rate of lay.

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Report for USAHA Transmissable Diseases of Poultry Committee.

On the second premises flock 3 and 4 were comprised of 17,000 breeder hens 39 weeks and 40 weeks old respectively. Egg production decreased about 20% in both flocks then gradually returned. Records on these two flocks were compared to comparable none infected flocks and the owner found that eggs per hen over the laying season was 10 eggs less in the infected flocks. Mortality was not significant.

Type of Virus

The influenza virus isolated from one flock on each of the premises involved was characterized at St. Judes Childrens Hospital and at the University of Wisconsin. Each of the isolates were characterized as Hav 1, Nav 2 Type A influenza.

Pathogenicity was checked at NADC, Ames and the findings were that it was not pathogenic in 4 to 6 weeks old chickens and turkeys.

Source of the Infection and Lateral Spread

There is no explanation of the source of infection in the first flock. Flock 2 was on the same premises and lateral spread was not unexpected.

Spread to the second premises (flock 3 and 4) was probably by insemination crews that were common for the four infected flocks. Other flocks on this same premises did not become infected and there is no evidence that the infection spread to other flocks in the state.

Vaccination

At the request of industry a vaccine was made by a commercial laboratory and most breeder hens were given 2 doses of this inactivated vaccine.

Summary

In March and April 1979, four turkey breeder hen flocks, 2 each on two separate premises, had avian influenza. The virus isolated was characterized as A/Hav 1, Nav 2 influenza virus. The virus caused little or no mortality in adult turkeys, but did cause a drop in egg production of about 20 to 25%. One of the four infected flocks never returned to average production. Transmission from one operation to the other may have been by common insemination crews. The source of the original infection is unknown.

Prepared by
L.C. Grumbles, DVM
Professor
Department of Veterinary
Microbiology and Parasitology
Texas A&M University
College Station, TX 77843