

American Association of Avian Pathologists
Report of the Committee on the Current Status of
Poultry Diseases - 1972

I. Preamble.

This committee was charged with assembling current information with regard to trends in poultry diseases and the emergence of new or unusual disease problems in all reporting regions of the United States and Canada. This effort was not intended to duplicate nor to be as definitive as the official reports of the various regions. Rather, it was hoped that information and professional opinions solicited from several sources could provide an up-to-date and concise picture of the dynamics of the major diseases affecting poultry in North America. It should be made very clear at the outset that this Committee has not derived its report from hard statistical facts. This report, therefore, is not an authoritative source of information and should not be so interpreted.

In our consideration of current disease problems we have dealt first with the exotic entities, secondly with new or emerging diseases and, finally, with the more common diseases grouped according to etiologic category. Currently used terminology is applied to new entities without detailed definition.

II. Exotic Diseases.

Viscerotropic, velogenic Newcastle disease (VVND) continued to present a serious problem to the poultry industry. The United States Department of Agriculture has compiled a historical record of the recent introduction of this disease into North America and this documentation is appended. At this point VVND virus strains have been isolated from psittacine or exotic birds in New York, Florida, Connecticut, California and Illinois. Commercial chicken flocks have been infected in Texas, New Mexico, Puerto Rico, California and Arizona. Virulent Newcastle disease has also occurred in Ontario, Canada causing heavy losses in both chickens and turkeys. As of late May, 1972, VVND continued to present a problem in California and Arizona although eradication efforts apparently have been successful in the Texas and New Mexico outbreaks.

Duck virus enteritis (duck plague) has been reported this past year in New York and Pennsylvania. A recent report in the news media notes confirmation of duck plague as the cause of a die-off of waterfowl on the California coast. This disease has been diagnosed in the Long Island area for the past several years.

III. New or Emerging Diseases.

Inclusion body hepatitis has emerged as an economically important disease entity of chickens over the last 2-3 years and is currently recognized in several midwestern, northeastern and southern states as well as the Provinces of Alberta, Saskatchewan and Ontario in Canada.

Egg production and shell quality problems have been associated with respiratory signs and unusual liver lesions in laying flocks in the midwestern and southeastern states. In several flocks an adenovirus similar antigenically to the CELO virus has been isolated.

Viral arthritis has been diagnosed with increasing frequency in chickens from the northeastern and southern states. This entity is reportedly accounting for an increasing proportion of the leg weakness problems in broilers.

A skin condition known as "necrotic dermatitis" and characterized by poor feathering, epidermal erosion and feather retention is of increasing concern to broiler growers in the Delmarva peninsula and in several southern states. This problem is apparently taking an economically important toll by virtue of condemnations and trim-outs on the processing line.

A profuse watery diarrhea graphically termed "the squirts" continued to be a problem in some parts of the southeast. This condition of unknown etiology has often occurred in caged birds and has created management problems due to the excessive moisture in the dropping pits.

IV. Viral Diseases.

A. Marek's Disease.

While all regions reported a much reduced incidence of Marek's disease as a result of vaccination, it is noteworthy that it remains the most frequently diagnosed condition in many concentrated poultry-producing areas. Reportedly the disease has started to increase in incidence in one of the larger poultry producing states in the southeast and the vaccine does not appear as effective as when it was first introduced.

B. Lymphoid Leukosis and Other Neoplastic Diseases.

From two reporting regions the true leukoses accounted for 2 and 5 per cent of all accessions respectively and the incidence has apparently not changed remarkably during the past year.

C. The Viral Respiratory Diseases.

Other than the exotic form, Newcastle disease appears to present a negligible problem in most regions. Isolated virulent outbreaks were reported in several midwestern states but these were not of the viscerotropic type. Infectious bronchitis has been a continuing problem in most regions but no alarming increase in incidence was noted. Infectious laryngotracheitis and respiratory fowl pox were either not mentioned as important diseases or were reportedly rare or non-existent. In one area

it was noted that vaccinations for these diseases is a rare practice. Influenza and parainfluenza infections have occurred in several turkey flocks in the midwest.

D. Other Viral Diseases.

Infectious bursal disease continued to present a problem in both layer replacement and broiler chickens in some midwestern and southern states. Avian encephalomyelitis apparently has occurred at a low incidence in most regions.

V. Bacterial Diseases.

Salmonella and Arizona infections continued to constitute a very common diagnostic entity. Reportedly most infections are subclinical but these infections remain of great concern to breeders. The incidence of pullorum and typhoid was very rare in all reporting regions. Colibacillosis represented the most frequently diagnosed bacterial disease in two regions, affecting both chickens and turkeys. Chronic respiratory disease and infections sinusitis were reported in significant numbers from some midwestern, northeastern and southern states and from Canada. Mycoplasma gallisepticum reportedly is widespread in egg producing flocks in several states and M. meleagridis has continued to be prevalent in most turkey-growing areas. Mycoplasma synoviae remained an important part of the leg weakness problem in most regions and air sac lesions constituted an important cause of broiler condemnations in the major broiler-growing southern states. Many contracts questioned the reliability of the diagnostic antigen for M.S. Staphylococcosis was a steady and persistent part of the leg weakness problem in both chickens and turkeys. Fowl Cholera has continued to be an economically important disease of poultry especially in concentrated turkey-growing areas. Gangrenous dermatitis (clostridium infection) was mentioned as an important disease problem in growing chickens in the southern and northeastern regions. Although not remarkably changed from previous years the incidence of erysipelas continued at a significant level in densely populated turkey-growing areas.

VI. Mycotic Diseases.

Aspergillosis and Candidiasis have persisted as common infections of both chickens and turkeys. A new pathogenic fungus, Dactylaria gallopavo has been reported from chickens and turkeys in South Carolina and Indiana. This agent produces respiratory lesions but causes especially severe encephalitic involvement.

VII. Parasitic Diseases.

Coccidiosis remained the second or third most frequently diagnosed disease of chickens. Eimeria acervulina has been particularly prevalent in the New England states. Reportedly some of the new anticoccidial medications have been highly effective. Other parasites were mentioned occasionally and apparently have presented only

sporadic problems.

VIII. Nutritional Diseases.

Selenium deficiency and fatty liver syndrome remain as significant disease problems in the midwestern, southeastern, and northeastern regions and in Ontario, although the incidence appeared to have decreased somewhat in the past year. Rickets and osteoporosis ("the soft bone problem") also were reported frequently from all regions. Aflatoxicosis was mentioned as an important disease entity from the southern region.

IX. Miscellaneous or Etiologically Undefined Diseases.

Ulcerative enteritis, and necrotic enteritis as well as "nonspecific" enteritis were diagnosed with significant frequency in all areas but particularly in the northeastern and southeastern states with concentrated broiler grow-out operations. Undefined leg weaknesses also constituted an important diagnostic entity in most regions and include such morphologic entities as tibial dyschondroplasia, kinky-back, granulomatous spondylitis and various bone deformities. Transmissible enteritis (bluecomb) in turkeys was not mentioned as a serious problem although a reduction in incidence was noted from Ontario. Many contacts noted that management problems are becoming the overriding issue in maintaining flock health and productivity with the implication that specific disease entities (especially infectious diseases) are assuming a secondary role. Furthermore, a few respondents described operations with very high planes of management in which the traditional infectious diseases are virtually non-existent.

Respectfully submitted,

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