## American Association of Avian Pathologists Guide for Disease Reporting Diseases of Commercial Poultry October 1985

Disease

Criteria

Acariasis

Observe and identify.

Adenovirus (unclassified)

This reporting category is for disorders caused by Adenovirus infection for which there is no named syndrome. The following should be reported under their specific headings: Enteritis, Hemorrhagic (Turkey): Bronchitis, Quail: Hepatitis, Inclusion Body: Hepatitis - Anemia Syndrome: Marble Spleen Disease.

Airsacculitis

(Air Sac Disease) Inflamed air sac(s) in which MG infection, Aspergillosis, or other specific disease entity is not incriminated.

**Amyloidosis** 

Report under "Miscellaneous Conditions."

Anemia

Any condition of uncertain etiology characterized by paleness, low packed cell volume and/or hypoplastic bone marrow.

Anemia, infectious

Report under "Hepatitis, inclusion body."

Anatipestifer Infection

Report under "Pasteurellosis, P. anatipestifer."

Aneurysm, Dissecting

Observe gross hemorrhage in the abdominal cavity which can be traced to a spontaneous rupture of the aorta.

Arizonosis

Report under "Salmonellosis, Arizonae."

Arthritis

(Not to include arthritis caused by  $\underline{\mathsf{M}}$ . Synoviae,  $\underline{\mathsf{M}}$ . gallisepticum,  $\underline{\mathsf{P}}$ . multocida,  $\underline{\mathsf{S}}$ . pullorum. These are to be listed under the category of the specific etiological agent.)

E. coli

Report under "Colibacillosis" when accompanied by systemic lesions.

Staph

Arthritis in which Staph is incriminated as sole or primary etiological agent.

Unidentified

Arthritis in which no specific etiology is determined.

Viral

Report under "Tenosynovitis."

Ascaridiasis (Ascariasis)

Observe and identify ascaridia.

Disease Aspergillosis Criteria
Characteristic gross and/or microscopic lesions.
Culture or identification by morphology of Aspergillus species.

Biotin/Pantothenic acid deficiencies

Dermatosis of the mouth and eyes and/or keratinization, cracking, and scaling of the feet.

Bluecomb Complex

Report under "Miscellaneous Conditions."

Botulism

Typical history, signs, necropsy findings (suspicious ingesta) and absence of infectious CNS diseases. Confirmatory inoculation tests (chicken/mouse) are encouraged.

Bronchitis, Infectious

History, signs, lesions, and confirmatory tests (FA, VI, serology, IB challenge).

Bronchitis, Quail

History, signs, lesions, and positive FA, VI, and/or serology.

Cage Fatigue

Report under "Osteoporosis."

Candidiasis

Isolation and identification of <u>Candida</u> <u>albicans</u> from active lesions, or presence of <u>mycelial</u> elements of Candida in mucosa of digestive tract. Do not report unless clinically significant.

Capillariasis

Observe and identify <u>Capillaria</u> worms or eggs in digestive tract.

Chlamydiosis |

History, gross lesions, and demonstration of Chlamydia in a stained smear of tissues. Confirm by isolation only if properly equipped facilities are available.

Cholera, fowl

Report under "Pasteurellosis, P. multocida."

Coccidiosis (chicken)

E. tenella
E. acervulina
E. necatrix
E. brunetti
E. mivati

History, lesions, and demonstration of oocysts or other developmental stages. If there are adequate morphological and other criteria to make a reasonably accurate diagnosis according to species, do so. If not, place under "Undetermined" or "Mixed."

E. maxima
Mixed

Undetermined

Coccidiosis (turkey)

E. adenoides
E. gallopavonis
E. meleagridis
E. meleagrimitis

Mixed Undetermined History, lesions, and demonstration of oocysts or other developmental stages. If there are adequate morphological and other criteria at your disposal to make a reasonably accurate diagnosis according to species, do so. If not, place under "Undetermined."

Disease Coccidiosis (other)

Criteria

Record coccidiosis in species other than chickens and turkeys here. History, lesions, and demonstration of oocysts or other developmental states.

Colibacillosis

Lesions and/or clinical syndrome suggesting bacteremia. Isolation and identification of  $\underline{E}$ . coli. Record specific conditions as omphalitis in their respective places.

Coligranuloma

(Hjarre's Disease) Gross and microscopic lesions. Cultural procedures often fail here.

Conjunctivitis
Keratifis, etc.

Include all inflammatory eye problems for which specific etiology that would fit it into other category cannot be established. Ammonia burn is included here.

Coryza, infectious

Demonstration of <u>Hemophilus gallinarum</u> essential. "Turkey Coryza" is reported under Alcaligenes. Rhinotracheitis".

Dermatitis Nutritional

Report under specific deficiency or under "Nutritional deficiency miscellaneous."

Funga 1

Report under "Mycosis."

Gangrenous

Identification of organism (Culture, F.A.) is encouraged. Clostridia or coagulase positive Staph. may be isolated.

Undetermined

No etiology or other than those above.

Egg Drop Syndrome

Report under "Adenovirus infection".

Encephalitis, viral
Avian encephalomyclitis

Clinical signs (paresis and tremors) usually seen in birds under 6 weeks; cataracts during growing age or later, and dip in production in layers. Confirm diagnosis by virus isolation, histology, or serology if feasible or desirable. Eliminate Newcastle Disease, encephalomalacia, Marek's Disease.

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Include here: California, Eastern, St. Louis, and Western.

Encephalomalacia

History, symptoms, gross, and microscopic lesions. Characteristic gross lesions often visible in brain. Encephalomalacia is the most common manifestation in young chickens.

Enteritis
Duck virus

Duck Plague

Disease

Hemorrhagic (turkey)

Criteria

Gross lesions (massive hemorrhages, peracute mortality). Supported by confirming tests when developed.

Mycotic

Presence of hairlike filaments, often internally beaded, extending from the mucosa into the lumen of the intestine, as revealed by microscopic examination (100X-400X) of a wet mount preparation of a deep mucosal scraping.

Necrotic (chicken)

Diffuse necrosis of the intestinal nucosa, often with formation of diphtheritic membranes and casts.

Transmissible (turkey)

(Turkey bluecomb, Coronaviral infection) Gross lesions (intestines without tone, watery to frothy contents) acute with high mortality in young poults, significant weight loss in growing birds and young adults, differentiate from salmonellosis and hexamitiasis. Supported by confirming tests: direct and indirect fluorescent antibody.

Ulcerative

Focal to diffuse necrosis of posterior intestinal tract and ceca, often stellate in character. Lesions readily observed from serosal surface and often perforate the tract. Liver lesions frequently observed, particularly in peracute cases. Isolation of Clostridium colinum is encouraged.

Unidentified

Those conditions, enteric in nature, that do not fit the above categories or other specific disease conditions.

Erysipelas

Lesions, bacterial identification, serology.

Exudative diathesis

Report under "Selenium deficiency."

Fatty liver syndrome

Lesions.

Femoral head necrosis

Confirmed at necropsy; fragility of the femur at only the proximal end.

Gizzard erosion

Lesions. Differentiate from worm problems.

Gout

Lesions.

Hemorrhagic anemia syndrome

Lesions, age, bone marrow, and blood changes.

Hepatitis

Avian Vibrionic

Lesions, vibrio identification.

Duck Virus

History, age, virus isolation.

Inclusion body

Histologically observe inclusion bodies. Virus

isolation attempts are encouraged.

<u>Disease</u> Turkey Virus Criteria

Lesions, poult infectivity.

0ther

All other liver inflammations.

Herpes virus infectious

Duck virus enteritis is reported under "Enteritis" laryngotracheitis under "infectious Laryngotracheitis", and Marek's disease under "neoplasms".

Heterakiasis

Presence of heterakis worms in ceca.

Hexamitiasis

Ballooned thin-walled intestine of turkey poults. Microscopic demonstration of Hexamita. Elimination of other infective agents as primary agents (Salmonella, transmissible enteritis, etc.)

Histomoniasis

Intestinal and cecal lesions and demonstration of  $\underline{H}$ . meleagridis, and/or typical liver lesions.

Impaction

Mechanical blockage of any part of the digestive tract.

Infectious Bursal Disease

(Gumboro)

Sudden onset, rapid spread with moderate mortality in young chickens. Characteristic lesions in bursa. Identify virus if warranted.

Influenza, avian

Positive serology or isolation and identification of virus (FA or other definitive tests).

Laryngotracheitis, Infectious Hemorrhagic pseudomembraneous exudate in trachea or caseous plug in larynx. (Eliminate pox). Mortality varies. Positive FA and/or isolation and identification of virus. Histopathology.

Leucocytozoonosis

Mortality during black-fly season. Identification of Leucocytozoon in blood smears.

Listeriosis

Report under "Miscellaneous Conditions."

Leukosis

See "Neoplasms."

Marble Spleen Disease

Histopathological examination.

Marek's Disease

See "Neoplasms."

Miscellaneous Conditions

As indicated.

<u>Disease</u> <u>Management factors</u> Criteria

These conditions, being noninfectious, will of necessity be diagnosed mainly by history, signs, and lesions observed:

Chilling
Improper debeaking,
dubbing, or toeclipping
Lighting
Obesity

Overcrowding Overheating Other

Starvation (feed or water)
Trauma

Ventilation

Mycoplasmosis
M. gallisepticum

Characteristic respiratory signs and lesions. Positive serology or identification of agent.

M. meleagridis

Characteristic lesions. Identification of agent if feasible.

M. synoviae

Lameness and/or swollen joints, and possibly airsacculitis. Serology, or identification of agent.

Unidentified

Isolation of a Mycoplasma species would have to be made.

Mycosis

Dactylaria, Thrush, etc.

Neoplasms

Lymphoid Leukosis

Absence of any nerve lesions. Intrafollicular proliferations of bursa. Differentiate from Marek's Disease and other neoplastic processes. Usually sexually mature birds, but not always. COFAL test.

Marek's Disease

Ataxia. Ovarian, testicular or skin lesions. Interfollicullar proliferation of bursa. FA. Differentiate from lymphoid leukosis and other neoplastic processes. Usually sexually immature birds.

0ther

Nephrosis

Gross and/or microscopic lesions.

Newcastle

Virus isolation and identification or serology, or FA.

**Omphalitis** 

History, lesions.

Ornithosis/psittacosis

See "Chlamydiosis."

Osteochondrodystrophy

(Dyschondroplasia, cartilage abnormality) Large persistent "tongue" of cartilage located in the posterior, medial area of proximal growth plate of tibia.

AAAP Guide for Disease Reporting (continued) Disease Criteria Osteomyelitis isolation, and identification of agent Lesions, (Staphylococcal, E. coli, other) (Involvement of bone). Osteoporosis Spontaneous vertebral fracture Cage fatique. Lesions, identification of cause different from perosis (involvement of bone). Paracolon infection Record under "Arizona Infection." Parasites (Miscellaneous) Any parasite not otherwise listed. Ecto Internal Pasteurellosis P. Anatipestifer P. anatipestifer must be isolated and identified. P. multocida Isolation and identification of Pasteurella multocida. (Fowl cholera) Other All species except P. multocida and P. anatipestifer. Pediculosis Identification of the parasite as a louse. Peritonitis Gross lesions and elimination of specific disease. Perosis Lesions. Pox, Avian confirm and by chick inoculation. or histopathology or virus identification. Proteus infection Isolation and identification of causative agent. Pseudomonas infection Isolation and identification of causative agent. Psittacosis See "Chlamydiosis." Reovirus Infections Other than tenosynovitis, report under "Miscellaneous Conditions." Reproductive Disorders

Lesions or anomalies. Gross physical findings (impaction, shell-less eggs, salpingitis prolapse, etc.).

Respiratory conditions Miscellaneous

Conditions where specific etiology is unknown respiratory conditions otherwise unlisted.

Rhinotracheitis, Alcaligenes

Isolation of Alcaligenes faecalis from upper respiratory tract with nasal exudation, conjuctivitis, and rales present. Report under "Alcaligenes Rhinotracheitis".

<u>Disease</u> Riboflavin Deficiency <u>Symptoms</u> and lesions. Eliminate neural lesions of Marek's Disease.

Rickets

History, age, symptoms, lesions. Record cage layer fatigue under "osteoperosis."

Roundheart

History and lesions.

Salmonellosis

a) Arizonae Isolate and identify organism.

b) Pullorum

Isolation of Salmonella pullorum.

c) Typhoid, Fowl

Isolation of S. gallinarum.

d) Paratyphoids

Isolation of Salmonella species other than  $\underline{S}$ .  $\underline{pullorum}$  or S.  $\underline{gallinarum}$ .

Sarcosporidiosis

Whitish yellow muscle lesions with long axis parallel to muscle fibers. Demonstration of protozoan bodies in smear of lesions, using Wright-Giemsa staining is encouraged.

Selenium deficiency

Whitish yellow areas of gizzard or breast muscles. Greenish subcutaneous edema. Hyaline degeneration of striated musculature. Demonstration by chemical analysis of low selenium content of feed (below 0.1 ppm) is encouraged.

Sinusitis

Inflammation of sinus when etiology cannot be determined. Report sinusitis under specific etiology if possible.

Spondylitis

Report under "Miscellaneous Conditions."

Staphylococcosis

Isolation of mannitol positive, hemolytic, coagulase positive Staphylococcus from blood or lesion. Negative for other pathogenic conditions or selenium deficiency.

Streptococcosis

Isolation and identification of specific <u>Streptococcus</u> (<u>S. gallinarum</u>, <u>S. zooepidemicus</u>, <u>S. faecalis</u>) from blood or lesions. Negative for other known pathogens.

Synovitis

Report under specific etiology: MG, MS, Staph, Tenosynovitis, etc.

Taeniasis

Gross or microscopic demonstration of tapeworms.

Tendon, ruptured

Other than caused by tenosynovitis. Red, green, or purple swellings above the hocks; birds walking on hocks. Demonstration of complete or partial rupture of gastrocnemius tendon.

<u>Disease</u> Tenosynovitis Criteria Swelling of

Swelling of leg tendons above and/or below hock joints. Sometimes swollen hock joints. Ruptured tendons with local skin discoloration may be present. Positive virus isolation and/or AGP test.

Toxicosis Drug

Signs and history of exposure. Histopath exam of kidney may identify sulfa granules.

Ag. Chemicals

Pesticides are included here. Can be diagnosed by signs plus history of exposure. If no known exposure, chemical analysis of tissue (Fat, brain, GI contents) is necessary.

Heavy Metals

Signs and history of exposure. Chemical analysis often necessary for confirmation.

Mycotoxicosis

Identification of a mycotoxin or unequivocal signs and lesions for a specific mycotoxin.

Miscellaneous

Any toxic condition that cannot be classified as above.

Transient paralysis

Report under "Neoplasms, Marek's."

Trichomoniasis

Microscopic exam necessary.

Tumors

Report under "Neoplasms."

Tuberculosis

Lesions, confirm with smear and acid-fast stain, or culture and identification.

Vitamin deficiencies

Vitamin A

Characteristic gross lesions and/or microscopic lesions (epithelial keratinization and squamous cell metaplasia of glandular epithelium).

Vitamin D

Report under "Rickets."

Vitamin E

Report under "Encephalomalacia."

Xanthomatosis

Report under "Miscellaneous Conditions."