DISEASES OF CHICKENS AND TURKEYS CORRELATED WITH AGE

By knowing the species affected, salient clinical feature, and age of the flock, it is often possible to make a list of potential differential diagnoses. In the following table, some of the more common diseases are presented by age and clinical problem. Of course, this will not be absolute but can be used as a guide.

BROILERS, PULLETS, LAYERS

Typical losses to 7 weeks of age are 4-5%. Losses in the first 2 weeks account for 30-50% of total mortality.

A. BROODING PERIOD (0-2 weeks)

1. Mortality
   A. Mismanagement
   B. Starveout/dehydration—floor temperature, water management
   C. Navel and yolk sac infection: *Salmonella, Escherichia coli, Staphylococcus, Proteus*, etc.
   D. Vaccine contamination
   E. Improper incubation conditions: small, weak hatchlings or increased susceptibility to infection

2. Respiratory Disease
   A. Aspergillosis (Brooder Pneumonia)
   B. Vaccine Problems—Respiratory reaction

3. CNS Disease
   A. Avian Encephalomyelitis
   B. Encephalomalacia
   C. Poor vaccine placement (pox, MDV)
   D. Spiking Mortality

4. Nutritional Deficiencies
   A. Rickets
   B. Other

5. Eye Diseases
   A. Ammonia Burns
   B. Mycotic Keratoconjunctivitis

B. GROWING PERIOD (2-8 weeks)

1. Mortality
   A. Coccidiosis
   B. Aspergillosis
   C. Ascites
   D. Marek's Disease
   E. Clinical Infectious Bursal Disease
   F. Inclusion Body Hepatitis/Aplastic Anemia
   G. Ulcerative Enteritis
   H. Necrotic Enteritis
   I. Chicken Infectious Anemia Virus
   J. Gangrenous Dermatitis
   K. Blackhead
2. Respiratory Disease
   A. Mycoplasmosis
   B. Newcastle Disease
   C. Infectious Bronchitis
   D. Infectious Laryngotracheitis
   E. Colisepticemia
   F. Avian Influenza

3. Lameness
   A. Tibial Dyschondroplasia
   B. Long Bone Distortion (Valgus-Varus Deformities)
   C. Infectious Synovitis
   D. Viral Arthritis
   E. Bumblefoot
   F. Osteomyelitis
   G. Staphylococcosis/Other septic arthritides
   H. Spondylolisthesis
   I. Rickets
   J. Ionophore/3-Nitro Toxicity

4. Skin Disease
   A. Gangrenous Dermatitis
   B. Fowl Pox
   C. Exudative Diathesis
   D. Skin Leukosis

5. CNS Disease
   A. Avian Encephalomyelitis
   B. Nutritional Encephalomalacia
   C. Newcastle Disease
   D. Marek’s Disease

6. Other
   A. Roundworms
   B. Toxicities—Mycotoxin, Botulism, Ionophore, 3-Nitro, etc.
   C. Crop Mycosis
   D. Cellulitis
   E. Swollen Head Syndrome
   F. Inflammatory Process
   G. Immunosuppression - IBD, CIA

C. PULLET PERIOD (8-20 weeks)

1. Neoplastic Diseases
   A. Marek's Disease
   B. Avian Leukosis (subgroup J)

2. Respiratory Diseases
   A. Infectious Coryza
   B. Infectious Laryngotracheitis
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C. Mycoplasma
D. Infectious Bronchitis
E. Newcastle Disease
F. Avian Influenza

3. Systemic Diseases
   A. Fowl Cholera

D. LAYERS (>20 weeks)
   1. Neoplasia
      A. Lymphoid Leukosis
      B. Carcinoma
      C. Sarcoma
      D. Marek’s Disease
   2. Respiratory Diseases
      A. Newcastle Disease
      B. Avian Influenza
      C. Infectious Bronchitis
      D. Mycoplasma
      E. Infectious Coryza
      F. Laryngotracheitis
   3. Egg Production Drops
      A. Newcastle Disease
      B. Avian Influenza
      C. Avian Encephalomyelitis
      D. Infectious Bronchitis
      E. Mycoplasma gallisepticum
      F. Infectious Coryza
      G. Nutrition/Management
   4. Salpingitis/Peritonitis
   5. Cage Layer Fatigue
   6. Fowl Mites
   7. Fatty Liver Hemorrhagic Syndrome
   8. Parasitism: Capillariasis, Heterakis, Roundworms, etc.
   9. Uterovaginal Prolapse
   10. Fowl Cholera

E. SPORADIC DISEASES
   1. Tuberculosis
   2. Botulism
3. Streptococcosis
4. Arbovirus Infection
5. Pullorum/Typhoid
6. Other Parasitic Diseases

TURKEYS

A. EARLY BROODING PERIOD (0-3 weeks)

1. Mortality/Poor Growth
   A. Mismanagement
   B. Omphalitis: *Salmonella, S. arizonae, E. coli, Proteus, etc.*
   C. Starveout
   D. Cannibalism
   E. Candidiasis
   F. Poult Enteritis
   G. Turkey Viral Hepatitis
   H. Coccidiosis/Cryptosporidiosis
   I. Poor Beak Trimming

2. Respiratory Disease
   A. Aspergillosis (Brooder Pneumonia)
   B. Turkey Coryza (Bordetellosis)

3. Lameness
   A. Splay Leg, Tibial Rotation
   B. Rickets
   C. Staphylococcosis

4. Nervous Signs
   A. Avian Encephalomyelitis
   B. Arizonosis
   C. Encephalomalacia—Vitamin E Deficiency
   D. Mycotic *Encephalitis—Aspergillus, Dactyliaria*

5. Eye Diseases
   A. Ammonia Burns
   B. Mycotic Keratoconjunctivitis — *Aspergillus*
   C. Arizonosis
   D. Injuries

B. LATE BROODING/EARLY GROWING PERIOD (3-12 weeks)

1. Mortality
   A. Round Heart Disease
   B. Hemorrhagic Enteritis
   C. Aortic Rupture/Hypertensive Angiopathy
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2. Respiratory Disease
   A. Mycoplasmosis—MM, MS, MG
   B. Turkey Coryza (Bordetellosis)
   C. Newcastle Disease
   D. Colisepticemia
   E. Fowl Cholera
   F. Avian Influenza

3. Lameness
   A. Spondylolisthesis ("Kinky Back")
   B. Bacterial Arthritidis—Staphylococcus, E. coli

4. Other
   A. Roundworms
   B. Mycotoxins

C. FINISHING PERIOD (>12 weeks-market)

1. Mortality
   A. Cannibalism
   B. Erysipelas
   C. Aortic Rupture

2. Respiratory Diseases
   A. Fowl Cholera
   B. Aspergillosis
   C. Chlamydiosis
   D. Newcastle Disease
   E. Avian Influenza

3. Lameness
   A. Long Bone Distortion
   B. Tibial Dyschondroplasia
   C. Osteomyelitis
   D. Bacterial Arthritidis—Staphylococcus, E. coli, Erysipelas, Pasteurella
   E. Scoliosis

4. Other
   A. Internal Parasites: Round Worms, Cecal Worms
   B. External Parasites: Mites, Lice
   C. Pendulous Crop
   D. Umbilical Hernias
   E. Breast Buttons/Blisters
   F. Turkey Pox
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D. BREEDERS (>30 weeks). Diseases of the finishing period can also occur during the laying period.

1. Mortality
   A. Fowl Cholera
   B. Aspergillosis
   C. Salpingitis/Peritonitis

2. Neoplasia
   A. Reticuloendotheliosis ("Turkey Leukosis")
   B. Carcinomas

3. Egg Production Drops
   A. Newcastle Disease
   B. Avian Influenza
   C. Other Paramyxoviruses
   D. Mycoplasmosis
   E. Nutrition/Management