

Ailments of Turkeys and Other Fowl

Fact Sheet No. 2.506

Livestock/Health

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Careful sanitation and management practices are key to keeping birds healthy. Keeping housing and feeding equipment clean and disinfected, keeping poultry areas free of debris and dead animals, minimizing rodent exposures and allowing only limited access to the poultry houses are important to healthy flocks.

Chronic Respiratory Disease (CRD), Infectious Synovitis, and *Mycoplasma meleagridis* infection are sometimes referred to as avian venereal diseases. Since all these disease conditions are egg transmitted, obtaining birds from a disease-free breeder flock is important to the prevention of these ailments in a flock.

Information such as the date of onset, number of birds affected, duration of symptoms, feed consumption, water intake and environmental conditions is of great diagnostic aid to a veterinarian.

A sound vaccination program is recommended and is important to every poultry flock owner. A professional should be consulted about individual situations.

Diagnosing Problems

Omphalitis, or navel infection, is a bacterial problem which enters through unhealed navels of young birds. Mortality peaks at about three to six days of age and, in general, no signs of the disease are seen after eight days. Evidence of omphalitis is demonstrated by an enlarged unhealed scab over the navel with moderate abdominal inflammation.

Salmonella, if transmitted through the egg, is noticeable in chicks as early as one day of age. If the incubator contaminated the young, the disease will be detected in about four to six days after placement. If the disease appears in birds older than six days, then the farm is the probable source of the infection. Chicks with the disease appear cold, seek heat, and pass a pasty white diarrhea. Pasty butt is not uncommon for this disease. Older birds are likely to develop swollen joints, and internal lesions on the liver and/or the spleen appears yellowish or gray.

Aspergillus (brooder pneumonia) is caused by a fungus which is inhaled. The infectious mold spores may come from unclean hatchery facilities, shipping boxes or from



Quick Facts

- Obtaining poultry from a disease-free breeder flock is important to the prevention of egg transmitted ailments.
- Most ailments have associated with them a set of symptoms that are not necessarily clear-cut.
- Professional assistance is usually required for positive diagnosis of an ailment in a poultry flock.

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the litter. Infected birds exhibit labored breathing as the most common respiratory symptom, but without rattling sounds associated with their breathing.

The following described conditions are similar to aspergillosis, but for these situations the birds generally exhibit a nervous reaction in addition to respiratory symptoms.

Avian encephalomyelitis (AE) – Infected birds generally are weak for two or three days. They lose their locomotion and there may be head and wing trembling. These birds do not eat well, and death is generally due to starvation.

Vitamin E and/or selenium deficiency shows up in older birds. The symptoms generally are similar to those of AE.

Vitamin D deficiency is characterized by poorly coordinated birds. It is often confused with a nervous condition. The locomotion problem is due mostly to weakness. The legs and beak may become soft and easy to bend. Generally, these birds do not show respiratory symptoms except as a secondary problem.

Chronic respiratory disease (CRD), infectious bronchitis (IB) and virulent Newcastle disease (VND) are similar to aspergillus, except that breathing is noisy. Also, with VND, nervous symptoms develop after about three to seven days of the respiratory signs.

With viscerotropic or virulent Newcastle disease (VND), the birds die before the nervous symptoms appear.

Exudative diathesis is a disease characterized by a greenish-blue fluid under the skin of the breast and abdomen. If the quantity of fluid builds substantially, birds develop locomotion problems and may exhibit signs of muscular dystrophy.

Sanitation and Management

- Feeders and waterers should be kept clean. They should not be transferred from flock to flock or house to house.
- All shipping coops, cages, holding pens and other housing facilities should be cleaned and disinfected thoroughly before moving a flock to the premises.
- All feed should be kept dry and cool. Do not use moldy feed. It may be more economical in the long run to dispose of moldy feed.
- Ponds and other wild bird habitats should be kept free from decaying plant life and animal carcasses.
- Any dead birds or animals should be removed immediately. Try to determine the cause of death.
- Birds of different ages or different species should not be housed together.
- Rodent and unwanted animal populations around a farm should be kept under control.
- Weeds around the poultry house that may interfere with air circulation or serve as habitat for unwanted species should be eliminated.

Ailment	Cause	Species/symptoms	Treatment	Prevention
Avian tuberculosis	Bacteria	All avian species – Excessive weight loss although appetite is maintained, diarrhea and possible lameness. Increased thirst, respiratory distress	None	Strict sanitation, range rotation, keep wild birds away from flock, don't mix young with old birds. Don't overcrowd, provide adequate ventilation.
Brooder pneumonia "aspergillosis"	Green mold (fungal)	Turkeys and captive game birds – Labored breathing that is accelerated, gasping, increased thirst.	None effective	Destroy affected birds, contaminated feed or litter; keep feed and litter dry. Normally from contamination at hatchery
Coccidiosis "cocci"	Protozoan	Turkeys, ducks, pigeons, geese – Birds look sick; e.g. hunched over, ruffled feathers with heads drawn; diarrhea usually occurs which may or may not be bloody, mortality varies with infection.	Amprolium, sulfa drugs	Keep nesting areas dry and clean; remove affected birds from flock; give a coccidiostat in the feed or water. Vaccine available for chicks, young develop resistance over time
Duck viral enteritis "duck plague"	Virus	Wild and domestic ducks, geese and swans - dehydration, blue beaks, bloody vent in young birds; loss of appetite, pasted eyelids, dehydration watery feces and nasal discharge in older birds, severe diarrhea	None	Cull affected birds and quarantine premises; eliminate cohabitation of wild fowl with domestic fowl.
Virulent Newcastle Disease "VND"	Virus	Chickens, turkeys and other fowl – Fast spreading with high mortality; severe respiratory symptoms; e.g., sneezing, coughing, nasal discharge, paralysis	None	Cull all affected birds, but save a few for laboratory diagnosis; vaccination is a must; start access control to the farm by people and wild birds. All cases of Newcastle must be reported to the state Veterinarian. Vaccination program, Biosecurity
Fowl cholera "cholera" "pasteurellosis"	Bacteria	Turkeys, wild birds and water fowl – Fairly fast spreading with high mortality; loss of appetite, darkening of the head parts (may be swollen), green discharge, Coughing and nasal discharge; the course of illness is short.	Sulfaquinoxaline and other sulfa drugs	Obtain disease-free stock and quarantine them on clean premises; keep other birds and mammals that may be carriers away from flock, rodent management
Groundnut Poisoning Turkey X-disease "mycotoxicosis" "aflatoxicosis"	Toxin	Turkeys, ducks, pheasants – lethargy, ruffled feathers, droopy wings; later incoordination; weight loss and death.	None proven; however, removal of old bad feed may help mild cases.	Use fresh feed; stored feed must be kept dry and in a cool environment.
Histomoniasis "blackhead"	Protozoan	Turkeys, peafowl, grouse and quail – listlessness loss of appetite; head parts may become blue-black in color. Yellow droppings, reddening of skin	Nitarosone	Replacement of a few inches of top soil; range rotation and the use of anti-histomonal drugs; e.g. hepzide. Don't range turkeys where chickens have ranged in the last 3 years (worms ingest histomoniasis) deworm birds, regular manure removal
Infectious Synovitis		Turkeys – lameness, pale head parts, retarded growth, slow growth; hock joints may be swollen.	Broad-spectrum antibiotics	Establish disease-free flock; follow a strict security management program; low levels of antibiotics help.
Limber neck "botulism"	Toxin	Wild ducks and captive pheasants, however all birds are susceptible – drowsiness, weakness and finally paralysis of the neck, wings and legs.	Give type C polyvalent antitoxin and fresh supply of water	Removal of stagnant water and decaying vegetation and carcasses.
Mycoplasma Meleagridis Infection, "M.M."	Mycoplasma	Turkeys – lowered hatchability; airsacculitis in young poults; leg weakness, poor weight gain. respiratory distress	Broad-spectrum antibiotics	Establish clean breeder flocks; dip eggs before setting.
Mycoplasma; Chronic Respiratory disease "CRD"		Turkeys – respiratory symptoms; e.g. coughing, sneezing, nasal discharge and swollen head. Chickens – nasal discharge and eye discharge, swollen sinuses, sneezing	Broad spectrum antibiotics	Depopulation of infected flock; obtain disease-free breeders.
Ulcerative enteritis "quail disease"	Virus	Upland game birds and turkey poults – similar to those of coccidiosis; listlessness, humped appearance with ruffled feathers; diarrhea which is sometimes bloody; in quail, white watery feces are distinctively characteristic.	Feed containing bacitracin, virginiamycin, lincomycin bacitracin in feed.	Eliminate all potential carrier birds; raise flock free from other species; do not mix old birds with young ones; practice good sanitation techniques.
Avian influenza (Bird flu)	Virus	Low pathogenic – respiratory issues, listlessness appetite loss, breathing difficulty, and reduced egg production High pathogenic – facial swelling, blue combs and wattles, dehydration, respiratory issues, may have blood tinged discharge from nostrils, may die before symptoms	Low – antibiotics, good care High – depopulation	Biosecurity – keep coop clean, prevent infection from wild birds, other flocks. All cases of Avian Influenza must be reported to the State Veterinarian.

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