

## AVIAN DISEASES OF CONCERN FACT SHEET

Disease	Description	Type of Pathogen	Symptoms & Signs	Methods of Spread
<p>* Avian Influenza (AI) There are two types of Avian Influenza:</p> <p>1. Low-pathogenicity AI</p> <p>2. High-pathogenicity AI</p>	<p>Respiratory disease of birds with wildfowl being the natural reservoirs.</p> <p>Few clinical signs present; H5 &amp; H7 strains are closely monitored because of their ability to mutate into high pathogen form</p> <p>Fatal form of the AI</p>	<p>Orthomyxo Virus</p> <p>(See Above)</p> <p>(See Above)</p>	<p>Severity varies (see below)</p> <p>- Slight facial swelling</p> <p>- Respiratory distress</p> <p>- Minimal mortality</p> <p>- Sudden &amp; high death loss</p> <p>- Purple discoloration of wattles, combs legs</p> <p>- Diarrhea</p> <p>- Incoordination</p> <p>- Nasal discharge, sneezing, coughing</p> <p>- Decreased egg production</p>	<p>- Direct contact between birds</p> <p>- Respiratory secretions</p> <p>- Feces</p> <p>- Contaminated litter</p> <p>- Contaminated clothing and equipment</p> <p>- Wild waterfowl are natural reservoirs</p>
Coronavirus Infection	Found predominately in pheasants. Birds affected may show no signs.	Virus	- Diarrhea - Lethargy	- Respiratory tract - Feces
*Duck Virus Enteritis: DVE	“Duck plague” Affects wild & domestic ducks, geese, and swans. Ducklings are most susceptible. (Blue-winged teal most susceptible; Pintail duck least susceptible)	Herpes Virus	- Excess thirst, dehydration - Weakness - Diarrhea - Blood-stained vent - Lesions of vascular, digestive, lymphoid systems	- Contact with wild waterfowl - Infected birds - Contaminated Environment
* Exotic Newcastle Disease (END)	One of the most fatal infectious, contagious diseases in the world; so deadly that many birds die before showing symptoms. However, virus can be destroyed by dehydration or sunlight.	Paramyxovirus	- Partial or complete drop in egg production - Misshapen or thin egg shells - Greenish, watery diarrhea - Muscular tremors - Paralysis - Gasping for air, nasal discharge, coughing, sneezing - Sudden death loss	- Direct contact between birds - Bodily discharges of infected birds - Contaminated clothes, equipment, & vehicles
Fowl Pox	Best prevented by vaccination. Can occur in 2 types: wet pox or dry pox	Pox Virus	<u>Dry Pox:</u> - yellow warts on combs & wattles <u>Wet Pox:</u> - yellow lesions in mouth or on trachea - difficulty swallowing & breathing	- Infected birds - Carrier birds - Mosquitoes, biting insects
Marek's Disease	Very contagious disease. Affects organs of the lymphoid system of young, sexually immature chickens 2-7 months old.	Herpes Virus	- Partial paralysis (wings, legs, neck) - Blindness, irregular shaped pupils (gray eye) - Multiple skin lesions - Tumors in nerve, organ, muscle, liver, lymphoid tissues	- Airborne transmission - Inhalation of feather dander, dust, or litter - Infected birds
* Infectious Laryngotracheitis (ILT)	Respiratory infection that affects chickens, pheasants, & peafowl. Spreads rapidly.	Herpes Virus	- Respiratory distress - Coughing, sneezing - Conjunctivitis - Facial swelling	- Infected birds - Carrier birds - Contaminated clothing, shoes, & equipment
* Avian Tuberculosis (TB)	Slow-spreading, chronic infection that is found worldwide. Can survive in soil for years. It can infect swine, sheep, rabbits, rodents, calves & humans.	Bacteria	- Diarrhea - Progressive wasting; emaciation - Pale coloration of comb, wattles, & face - Lesions in liver, spleen, intestines, other organs	- Contaminated environment - Feces - Bird to Bird contact
Fowl Cholera	Respiratory disease that affects many species of domestic, wild, & zoo birds. Can occur in chronic or acute form. High morbidity with acute form.	Bacteria	- Swollen eyes & wattles - Anorexia/ decreased appetite - Decreased egg production - Swelling of joints - Mucus discharge from mouth or nose	- Bird to bird contact - Contaminated clothing & equipment - Contaminated feed and water

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* Salmonellosis	Lives in the intestinal tract of affected birds and causes intestinal disruption. <i>Salmonella enteritidis</i> & <i>Salmonella typhimurium</i> are not host specific, normally affecting birds under 6 weeks old.	Bacteria	- Anorexia - White diarrhea, pasting around vent - Huddling near heat sources - Increased mortality by 5 <sup>th</sup> day - Swollen joints - Poor feathering	- Infected eggs & birds - Feces - Contaminated food
* Fowl Typhoid	Affects semimature flocks. Very similar to Pullorum disease. Caused by <i>salmonella gallinarum</i> bacteria.		- Anorexia - Poor growth - White diarrhea, pasting around vent - Wing droop	- Infected & hatching eggs - Infected birds - Feces - Contaminated Feed
* Pullorum Disease	Egg transmitted disease that occurs primarily in chickens, pheasants, ducks, geese & guinea. Usually, no signs are apparent in adult birds. Caused by <i>salmonella pullorum</i> bacteria.		- Anorexia - Lethargy - Depression - Shivering - Fever	- Direct contact - Contaminated feed - Environment
Blackhead	Affects chickens, turkeys, & peafowl. Can be transferred by intermediate hosts (cecal worms and earthworms).	Protozoa	- Depression - Yellow diarrhea - Ruffled feathers - Dark-colored head parts	- Contaminated water, feed, & droppings - Indirect transmission by infected eggs - Environment
Coccidiosis	Lives and multiplies in the intestinal tract. Results in high mortality. Can be greatly reduced by housing birds in a sunny dry area.	Protozoa	- Bloody droppings - Ruffled feathers - Huddling - Decreased appetite - Pale combs	- Feces - Contaminated clothing & equipment - Infected litter
Internal Parasites Roundworms Hairworms Cecal Worms Tapeworms	Can be transferred by intermediate host, such as beetles and insects. Avoided by regular deworming	Internal Parasitic	- Anemia - Emaciation - Stunted Growth - Decreased egg production	- Infested soil - Inadequate deworming schedule - Ingestion of infected feces
Lice	Avoided by cleaning facilities & equipment between flocks. Are most common during fall & winter. Eggs and mature lice can be viewed by naked eye on feathers. Lives only on host.	External Parasite	- Anemia - Malnutrition - Weight loss	- Bird to bird contact
Northern Fowl Mite	Avoided by regularly cleaning area that houses birds. Lives on host and in the environment.	External Parasite	- Blackened feathers - Scabby skin around vent	- Infested egg flats - Infested facilities - Bird to bird contact
Scaly Leg Mite	Should isolate affected birds. Treat by dipping legs in warm acaricidal solution (contact veterinarian). Lives on the host and in the environment.	External Parasite	- Scaly and crusty legs, combs, & wattles	- Infested egg flats - Bird to bird contact
Curled Toe Paralysis	Can affect all birds but young chicks are most susceptible.	Nutritional	- Curled toes - Hyperextension of Legs - Lameness	- Riboflavin (B2) deficiency
Encephalomalacia	“Crazy chick Disease”	Nutritional	- Swollen brain - Inability to walk - Falling sideways when trying to stand	- Lack of vitamin E
Rickets	Can affect all birds. Avoided by feeding a balanced ration.	Nutritional	- Inability to stand - Soft pliable legs and beaks - Beading of ribs	- Imbalance of Calcium (Ca), Phosphorus (P), and/or vitamin D3

\* Reportable Diseases in Maryland Call: 410-841-5810

Visit Maryland Department of Agriculture website [http://www.mda.state.md.us/animal\\_health/disease/reportable](http://www.mda.state.md.us/animal_health/disease/reportable) for complete list of reportable diseases in Maryland.