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Common Diseases Of Poultry in Idaho

The most important phase of a bird's life in relation to care and surroundings is during the brooding period. Young birds are more susceptible to many diseases than are older birds. This is especially true for Marek's Disease and Lymphoid Leukosis. Marek's Disease is characterized primarily by paralysis and skin tumors. Purchase chicks that have been vaccinated at 1 day of age for Marek's. Leukosis is less common and generally occurs during egg production. Internal visceral tumors are most common.

Chicks exposed to Marek's Disease during the first 30 days of life are much more likely to become infected than if exposed as adults. Some diseases, such as chronic respiratory disease, epidemic tremors and pullorum disease, can be transmitted through the egg.

Good brooding practices start before the arrival of the chicks. The brooder house should be completely scrubbed and disinfected. All equipment should be cleaned and disinfected. Products containing either a coal tar or quaternary ammonia base are good disinfecting agents. Time should be allowed to completely air out the house before the chicks arrive.

Brooding in complete isolation from older birds is extremely important. Brooding facilities should be at least 150 feet away from other poultry buildings. Having only one person take care of the chicks is a good practice. That person should not be around other birds.

If this arrangement is impossible, a shallow pan containing disinfectant should be placed at the brooder entrance. All people entering the pen should step into this disinfectant to prevent spread of diseases carried on their shoes. If one person must care for both the chicks and old birds, take care of the chicks first. Do not permit visitors to enter the brooding area as they may carry diseases to the chicks.

Carefully protect birds during the brooding period. If any signs of trouble are seen, an accurate diagnosis and prompt treatment will save money and trouble.

A few simple precautions during the brooding period will help assure healthy and profitable birds.

Clean, Sanitary Housing

Disease prevention is always much more desirable than any kind of treatment. Clean, sanitary poultry houses help prevent most diseases. When housing pullets, follow the same cleaning procedure described for cleaning the brooder house.

A satisfactory poultry house provides maximum comfort for the birds and maintains constant environment conditions. The house should be well constructed, insulated in walls and ceiling and properly ventilated.

Moist litter greatly increases the hazard of disease. If the watering device is placed on the litter, some spillage is likely to occur, resulting in wet litter. This problem can be avoided by placing water equipment on the roosting rack. Another way to help keep litter dry is to place feed hoppers on the roosting rack.

Stressing the point again, keep visitors out of the poultry house. Many poultry diseases are carried from place to place by people. A pan of disinfectant should be placed at the entrance of the poultry house to disinfect shoes each time the house is entered.

Properly screen all windows and openings to keep wild birds and rodents out of the poultry house. They are capable of carrying diseases to chickens.

Vaccination Pointers

The vaccination of poultry against certain diseases is not a substitute for sound management and good sanitation practices. However, for certain diseases such as Newcastle disease, infectious bronchitis and fowl pox, vaccination is necessary in areas where any of these diseases are present. Obtain a copy of "Vaccination of Poultry," Current Information Series No. 303, from your Cooperative Extension Agent.

There are certain basic guidelines for a successful vaccination program. By following these rules, the vaccination program will be much more effective:

1. Check with your chick supplier before purchase to arrange for vaccination for Marek's Disease at hatch time.

Trouble Shooting Chart for Comm

Disease	Symptoms	Post Mortem Findings
MAREK'S DISEASE	2 to 6 weeks incubation period. Lameness of 1 or both legs, slight drooping of 1 wing at times, paralysis. Generally occurs 6 to 12 weeks of age.	Enlarged and discolored sciatic (leg) nerve. T occur in skin, internal organs, eyes.
NEWCASTLE DISEASE	CHICKS —Difficult breathing, sneezing, gasping. May be accompanied or followed by paralysis, tremors, head drawn back or down, circling or walking backward. ADULTS —Respiratory and occasional nervous symptoms. Rapid and severe drop in egg production.	No characteristic lesions. Laboratory diagnosis n
INFECTIOUS BRONCHITIS	Same as Newcastle for both chicks and hens except no nervous symptoms.	Same as Newcastle.
CHRONIC RESPIRATORY DISEASE	Nasal discharge and slight swelling below eyes. Coughing, sneezing and hoarse throat rattle. Loss of weight with numerous culls. Gradual drop in egg production.	Mucus in trachea and sinuses. Cheesy or cloud Heart sac white and thickened. Liver sometim by yellowish-gray membrane.
TURKEY INFECTIOUS SINUSITIS	Swollen sinuses with mucous nasal discharge and watery eyes. Labored breathing and coughing.	Pus in sinuses. Air sacs may be cloudy and con material.
INFECTIOUS CORYZA	Nasal discharge. Swelling of face and wattles. Sinuses filled with mucus and cheesy material. Bulging of the eyes. Difficult breathing.	Mucus and cheesy material in sinuses and ages.
BLUECOMB (PULLET DISEASE)	Rapid drop in egg production and feed consumption in young pullets. Diarrhea. Combs dark. Crops may be compacted with feed. Loss of weight.	Yellow areas in liver. Intestines inflamed "fish flesh" areas in muscles. Soft or broken yolk
COCCIDIOSIS	Weakness, listlessness, drooping wings, ruffled feathers, diarrhea. Bloody droppings in some types.	CECAL TYPE — Blood in ceca. Cecal cores in INTESTINAL TYPES —Inflammation of inte mucus-like or blood-tinged material.
FOWL POX	Wart-like scabs about comb and head. Yellow cankers in mouth and eyes. Drop in egg production.	Yellow cankers in mouth and throat. Sinuses volved.
LYMPHOID LEUKOSIS	Sometimes emaciation and pale or yellow combs. Paralysis.	VISCERAL TYPE —Enlarged liver. Tumors organs.
EPIDEMIC TREMORS (Avian Encephalomyelitis)	Tremors of head and neck of young chicks. Complete or partial paralysis, unsteady gait and resting on hocks.	None.
FOWL CHOLERA	ACUTE : Sudden losses. Purplish combs. Difficult breathing. Watery diarrhea. Sick birds inactive, weak and droopy. Will drink water but not eat. CHRONIC : Swollen wattles, earlobes and joints. Reduced egg production.	Hemorrhages in membranes of respiratory tr ines and heart. Liver light in color and streak material about heart and lungs. Breast appear and feverish.
INTESTINAL WORMS	General unthriftiness, retarded growth and lowered production.	Roundworms in the intestines. Tapeworms a intestinal wall. Cecal worms in ceca. Moderate enteritis. Small nodules or hemorrhages in the in

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Diseases and Parasites of Poultry

	Cause and Spread	Prevention and Treatment
may	Herges virus. Spread rapidly by eggs, air, other birds.	Vaccinate by vaccine injection at hatching time. TREATMENT: None.
ary.	Virus. Spread by direct contact, air, equipment, feed sacks, caretaker, etc.	Good sanitation. Vaccinate, following instructions given with the vaccine. First vaccine should be at 4 to 10 days. Repeat as recommended for layers. Water vaccine most common. Rear young birds away from old stock. TREATMENT: None.
	Virus. Spread same as Newcastle.	Good sanitation. Vaccinate. Don't mix birds of different ages. Brood and rear young birds away from old stock. TREATMENT: None.
sacs. vered	Mycoplasma gallisapticum. Spread by egg transmission and by direct contact, by contaminated litter, water or feed. Spreads slowly.	Practice good management and sanitation. Avoid stress factors. Brood in isolation and keep age groups separate. TREATMENT: High level antibiotics may favorably alter the course of the disease.
eesy	Same as chronic respiratory disease.	Same as chronic respiratory disease. TREATMENT: Treat individual birds with streptomycin.
pass-	Bacteria. Spread by carriers, air, contaminated feed sacks, equipment, clothes, infected birds.	Good management and sanitation. Depopulation or strict segregation of survivors. TREATMENT: Sulfathiazole.
nken	Unknown, but recent work suggests a viral agent.	Good sanitation and management. Stimulate feed consumption. Feed a high level of a broad-spectrum antibiotic.
birds with	Microscopic parasites. Spread through droppings and material contaminated with them. Damp litter and soil increase disease spread.	Good management and sanitation. Use continuous low-level medication in the feed and a proven coccidiostat drug. TREATMENT: Use high levels of an approved coccidiostat drug according to manufacturer's directions.
e in-	Virus. Spread by direct contact, mosquitoes, contaminated equipment and free flying birds.	Vaccinate young birds (3-15 weeks) with fowl pox vaccine. Use pigeon pox vaccine on birds in egg production. Vaccinate only if disease is problem in area. TREATMENT: None.
ernal	Virus. Spread through the egg or through contact of non-infected with infected chicks or adult stock or materials contaminated by them.	Young chicks are highly susceptible. Brood them in isolation. TREATMENT: None.
	Virus spread through the egg.	Segregate birds by ages. Cull affected birds. TREATMENT: None. PREVENTION: Pullets to be used as breeders can be vaccinated.
ntest- heesy ened	Bacteria. Spread by contact with infected birds, flies, wild fowl and by materials contaminated by their body wastes.	Sanitation. Keep birds separated by ages. Keep wild birds out. Depopulation necessary in severe cases. Vaccinate with Bacterin at 12-16 weeks in problem areas. TREATMENT: Use proven sulfa drugs. Disease may recur after treatment stopped.
ed to evere es.	Numerous species of roundworms and tapeworms. Roundworms spread through infested litter and soil. Tapeworms spread by intermediate hosts such as flies, ants, earthworms, grasshoppers, snails, slugs, etc.	Strict sanitation. Rotation of range. Spray for insect control. Treat with reputable medication for specific worms present.

2. Vaccinate your birds for other diseases if they are present in your area.
3. Always follow the vaccine manufacturer's directions.
4. Do not vaccinate birds if they are sick.
5. Handle vaccines carefully to prevent spread of disease.
6. Do not give fowl pox vaccine at the same time as other vaccines.
7. Do not attempt to substitute vaccination for sound management and sanitation practices.

Stress Factors

Stress factors may be described as conditions which have the effect of lowering the vitality of the birds to the point where their bodies cannot successfully fight off disease. The more important factors associated with poor and inadequate housing and management which create stress are crowding, insufficient water, insufficient feed and feeder space, wet litter and inadequate ventilation.

Many stress factors may be present during the brooding period. Chicks are under stress when they are overheated or chilled. Poor housing, poor care and overcrowding are other stress factors. Chronic respiratory disease is an illustration of how stress factors work. This disease can be egg-transmitted. Usually no trouble will be seen in a group of chicks which has a low-level infection of chronic respiratory disease but, if stress factors are present, the disease will be severe. Losses will occur and the pullets may not produce well when housed.

Vaccination for one disease can create a stress factor for other diseases. For this reason, vaccinate only birds that are in good health. Stress factors generally are related directly to housing management practices and the sanitation program of the poultryman. Paying close attention to all of these details, regardless of how small they may seem, is extremely important in keeping stress factors to a minimum.

Disposal of Dead Birds

Disposing of dead birds is an important part of any poultry program. Dead birds always offer a source of spreading infection unless prompt and proper disposal is made.

There are 2 general methods used in disposing of dead birds: to burn in a commercially-made or home-made incinerator or to use a disposal pit. Either method is satisfactory.

How to Build an Incinerator

1. Secure a 50-gallon oil drum and cut a hole 16 inches square near the bottom for a firebox entrance.
2. Cut a hole in the top of the barrel near the edge for a 4- to 5-inch stovepipe.
3. Cut another hole in the top, across from the first, about 12 inches in diameter through which dead birds can be dropped.
4. Halfway up the barrel, punch a series of holes 2 or 3 inches apart in such a manner that $\frac{1}{2}$ -inch rods can be inserted into the holes to make the grate.

How to Build a Disposal Pit

1. Dig a circular hole about 7½ feet in diameter and 6 feet deep.
2. Mark off a circle 6 feet in diameter at the bottom of the pit and lay a row of concrete blocks (8x8x16 inches) outside this line.
3. Using concrete blocks, line the entire pit to ground level, offsetting each layer of blocks 1½ inches in toward the center.
4. Set an 8- x 12-inch tile (bell end down, on 2 2x8's layed across the top layer of blocks. All lumber should be treated with a preservative to prevent rot.
5. Cover the top of the pit with rough planks that have been treated.
6. Cover all but the tile opening with soil.
7. Provide a tight cover for the tile opening.

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