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Vaccination Methods

Individual Bird Treatments

Injections (Fowl cholera, Newcastle disease, Marek's disease)

Intranasal (Newcastle disease, bronchitis)

Intraocular (Newcastle disease, bronchitis)

Wing web (Fowl pox, Newcastle disease)

Flock Treatment

Water (Newcastle disease, bronchitis, epidemic tremors)

Spray (Newcastle disease, bronchitis)

Dust (Newcastle disease, bronchitis)

# Vaccination Of Poultry

C. F. Peterson and C.S. Card

## Need for Vaccination

Idaho poultry producers should follow a regular vaccination program to reduce disease losses. Vaccines should be used to protect against the following diseases where they are known to exist:

1) Marek's disease, 2) Newcastle disease, 3) infectious bronchitis, 4) fowl pox, 5) fowl cholera and 6) epidemic tremor.

The specific program you should follow will depend on the diseases common to your area. Your Cooperative Extension Agent, chick supplier, veterinarian or feed dealer can advise you on what protection you need to provide.

Remember, a vaccination program is not a substitute for good management. It is a tool which supplements good management.

## Vaccination Time

**Marek's Disease:** Most Marek's vaccines must be stored under liquid nitrogen. Greatest immunity is obtained when chicks are vaccinated at hatching time. When purchasing chicks, request that they be vaccinated for this disease. Proper vaccination has greatly reduced serious problems and mortality of young birds.

**Other diseases:** Start when the chicks are a week old. Vaccinating chicks during the first week does not stimulate maximum immunity against these diseases if the parent stock has been vaccinated or experienced an outbreak. These chicks carry passive immunity to infectious bronchitis, Newcastle disease and epidemic tremor for a period of 7 to 10 days after hatching.

**Vaccination always causes stress on the birds.** Stress, in turn, can cause such conditions as C.R.D. (*Mycoplasma gallinarum*) to become a very serious problem. Although combination vaccines are available, separate treatments are recommended except for booster vaccinations. Allow several days between the administration of vaccines to reduce stress on the birds.

**THE AUTHORS** — The authors are members of the University faculty. C. F. Peterson is poultry scientist, Department of Animal Industries, and C.S. Card is pathologist, Veterinary Science Department.

If you treat the bird individually, you know that each bird has received the proper amount of vaccine. The disadvantage of this method is the added stress on the birds. The stress may create additional problems, requiring more labor. Mass or flock vaccination is easier, but some birds may receive no vaccine. Others will not get enough. **Revaccination is therefore more important.**

Special attention is needed when vaccine is used in the drinking water. To assure that all birds obtain some vaccine, remove the water supply for a period of time so that birds are thirsty. If the birds are on range, select a warm day to encourage water consumption. Use enough water for a 3 to 4 hour period. Follow mixing instructions in detail and use clean equipment. The water supply should not contain chlorine or other disinfectants.

## Precautions to Observe

Vaccines, except for the killed-type, contain living viruses intended to cause a mild form of the disease. The birds then develop immunity to field strains of the viruses. The reaction will generally be mild if:

1. Birds are healthy.
2. The poultry house is clean and dry.
3. You make no sudden changes in management practices.
4. You maintain proper brooder temperature. (Temperature may be raised 3 to 5 degrees for a few days after vaccination.)
5. You follow vaccine manufacturer's recommendations carefully.
6. You obtain booster vaccines from the same manufacturer as the original.

Immunity is not always permanent for infectious bronchitis. Newcastle disease and epidemic tremor. As birds mature or continue in heavy egg production, immunity tends to "run out." Therefore, you may have to repeat or give booster vaccinations. This is especially true when the vaccine is water-administered.



# Vaccination Schedule

Recommended by University of Idaho Extension Service

		Vaccination Record for Flock No.:								
Age of Birds	Type of Bird (Replacement pullet or broiler)	Disease	Method	No. 1 Date	No. 2 Date	No. 3 Date	No. 4 Date	No. 5 Date	No. 6 Date	No. 7 Date
1 day	Replacement pullet and broilers	Marek's disease	Injection							
7-10 days	Replacement pullet and broilers	Infectious bronchitis	Drinking water, intranasal or intraocular							
17-21 days	Replacement pullet and broilers	Newcastle disease	Drinking water, intranasal or intraocular							
8-10 weeks	Replacement pullet	Fowl pox	Wing web							
12-14 weeks	Replacement pullet	Fowl cholera	Injection under skin of neck							
14 weeks	Replacement pullet	Epidemic tremor*	Drinking water							
16 weeks	Replacement pullet	Infectious bronchitis	Drinking water							
18 weeks	Replacement pullet	Newcastle**	Drinking water or wing web**							
28 days	Broilers	<b>C.R.D. and Worm Control</b> Erythromycin, Bacitracin, Tylosin or other acceptable drug or C.R.D. control								
32 days - 16 weeks	Broilers and replacement pullet	Piperazine in water or Hygromix in feed for worm control								

Use a coccidiostat first 8-9 weeks in feed if birds are on litter.

Use a potentiated feed 3 days and 3 days following each vaccination, 100-200 gm./ton.

Use a dewormer in feed or water as recommended by manufacturer prior to egg production or as needed if birds are on litter.

\*Applies to chicks for breeder flocks

\*\*Booster every 3 months during egg production recommended if wing web is not used. Wing web at 18 weeks gives immunity for 1 year.

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