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# Vaccination program for chickens in Colorado

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## Quick Facts

- Before vaccinating poultry, the disease and vaccination history of the flock should be known.
- Only flocks in good health should be vaccinated.
- Vaccines are living, disease-causing organisms, and they should be treated with respect.
- Outdated vaccines should never be used.
- Correct dosages should be given to birds; doses should not be stretched.
- Vaccines should be kept cool, away from sunlight and direct heat, and stored according to manufacturer's directions.
- Good sanitation is the key to all disease prevention programs.

## Personnel Selection

One person well trained in techniques and methods should be selected to give all vaccinations. This person should be up to date on all disease outbreaks within the state and should be aware of all new vaccines available and of any changes in routes of administration of the vaccines.

## Care of Vaccines

It should be remembered that most vaccines are living, disease-causing organisms, and they should be treated with respect. All vaccines should be kept cool and out of the sun, following the manufacturer's recommendations for storage.

An inventory of all vaccines should be kept current; the oldest supply should be used first, and *outdated vaccines should never be used*. After the vaccines are used, all leftover vaccine containers should be disposed of by incineration or by using a strong disinfectant. Disinfectants (sanitizers) in water destroy living vaccines. (See section on preparation and administration of vaccines for more details.)

## Vaccination Records

Complete records of vaccination programs should be kept at all times. The records should contain the following information:

- Identification for flock receiving vaccination; e.g., flock number, farm number and building number.
- Name and/or type of vaccine and method of administration.
- Serial number of the vaccine.
- Expiration date of the vaccine.
- Manufacturer of the vaccine.
- Date the vaccine was given.
- Name of person giving the vaccine.
- Method, temperature and where the vaccine was stored.

This leaflet was not written because Colorado has a poultry disease problem, but rather to serve as a helpful guideline in the prevention of some of the more important poultry diseases.

All day-old chickens should be vaccinated at the hatchery for Marek's disease. Young chickens also should be vaccinated with Newcastle and infectious bronchitis vaccines during their young growing life, followed by a program of repeated vaccinations against these two diseases during the egg production period. Either the B<sub>1</sub> Hitchner strain of Newcastle vaccine or the B<sub>1</sub> La Sota strain may be used.

Vaccines for the protective control of other diseases of chickens also are discussed in this fact sheet. (For more information on ailments of chickens, see Service in Action sheet 2.505.)

## Successful Vaccination Procedure

A program suited to an individual area or ranch should be selected. Before vaccinating poultry, the disease and vaccination history of the flock should be known. Only flocks in good health should be vaccinated and not during periods of stress; for instance, during debeaking or moving.

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## Preparation and Administration of Vaccines

The person giving the vaccinations should

- be sure vaccine is *not* outdated;
- store and administer all vaccines according to manufacturer's recommendations;
- withhold sanitizers from drinking water three days prior to administering vaccine by water;
  - wash all drinkers with a brush and *clean water* (not sanitizers or soaps) 24 hours prior to vaccination;
  - remove drinking water one hour prior to giving vaccine by the water method (if birds are in production, 30 minutes should be allowed);
  - give vaccines within 30 minutes of the time they are prepared;
  - make sure that correct dosages are administered to birds (doses should not be stretched);
  - keep vaccines away from sunlight and direct heat.

In preparation of water-type virus vaccines, salmonella-free, powdered skim milk should be added to the vaccine. The milk proteins neutralize small amounts of sanitizer that may be present in the water.

Three ounces (85 grams) of powdered skim milk should be mixed with 10 gallons (38 liters) of clean water. The vaccine should be premixed as directed. The premixed vaccine then can be combined thoroughly with the premixed skim milk and water. A person then should administer

the vaccine immediately, taking all precautions as directed by the manufacturer (i.e., wearing face mask, etc.).

Vaccination is one of many methods that can be used to help prevent disease, but good sanitation practiced by all personnel is the one **key practice that must be used in all disease prevention programs.**

**Table 1: Vaccination program for layers.**

Vaccine	Age	Method
Marke's (HVT)	1 day	At hatchery
Combined Newcastle/ infectious bronchitis (LaSota and Mass.)	1-2 weeks	Water or spray
Combined Newcastle/ infectious bronchitis (LaSota and Mass.)	5-6 weeks	Water or spray
Fowl pox*	9-10 weeks	Wing web
Avian encephalomyelitis	12 weeks	Water
Combined Newcastle/ infectious bronchitis (LaSota and Mass.)	14 weeks	Water or spray
Laryngotracheitis**	6 weeks, 20 weeks	Eye drop
Combined Newcastle/ infectious bronchitis (LaSota and Mass.)***	20 weeks	Water or spray

\*Fowl pox vaccine need not be given unless it has been administered in the past or if there has been an outbreak in the area.

\*\*Laryngotracheitis vaccine should not be given unless there has been a history of the disease on the premises or unless there is an outbreak in the area.

\*\*\*Starting at 20 weeks of age and continuing through the lay cycle, all birds must be vaccinated with Newcastle's/infectious bronchitis vaccine every 10 weeks.