If you use a different type vaccine or a different vaccination schedule and are satisfied with the results, do not change just to meet these suggested vaccination procedures. However, work out a vaccination program for the individual farm that will assist in disease control in the area.

Newcastle Disease

Vaccines:

1. Killed Virus (dead vaccine)
   A. Helps to prevent heavy losses and drastic decrease in egg production. Breaks following vaccination in chicks have been observed more often than we like to see. Lowered egg production observed even after three vaccinations when hens were exposed by contact to the disease.
   B. Will not cause the disease in vaccinated or contact chickens.

2. Live Virus, "Stick" Method Vaccine ("hot vaccine")
   A. Immunity produced usually satisfactory.
   B. Too "hot" for chickens under 4 weeks of age or birds in egg production.
   C. May cause a severe reaction in vaccinated birds under some conditions of stress, including some paralysis.
   D. Vaccinated birds can spread the disease to non-immune fowl for a time following vaccination.
   E. Good immunity may not be produced if used too soon after vaccination with Bl type vaccines.

3. Live Virus Bl like Types (Mild live virus vaccines)
   A. Does not spread NCD from newly vaccinated chickens to non-immune birds.
   B. Can be used on chickens of all ages, but may decrease egg production in layers.
C. Reaction to vaccination and degree of immunity influenced by method of application and in young chicks by amount of passive immunity from the dams.

1. Application methods: (1) drop in one nostril, (2) drop in one eye, (3) drinking water, (4) spray, (5) dust, and (6) intra-muscular.

Suggested Vaccination:

1. Fryer Flocks

A. If ND is on the farm or close to it: Vaccinate at one day of age using one drop of Bl type vaccine in one eye of each chick or use Bl type drinking water vaccine at 3 days of age. Revaccinate at 3½ weeks of age using drinking water vaccine.

B. If ND is not an immediate problem: One vaccination by the drinking water method 14-21 days of age should produce protection to market age.

2. Replacement Flocks

A. If ND is on the farm or close to it: Vaccinate the same as for (A) under Fryer Flocks.

B. If ND is not an immediate problem: Vaccinate 14-21 days of age using the drinking water or eye drop methods.

C. Revaccinate both (A) and (B) at housing time (just prior to start of egg production). If the drinking water method is used, the flock should be given a "booster" vaccination by this method every 4 months.

3. Turkeys

A. Vaccinate at time breeders are selected or when blood is taken for the pullorum test. Can use "stick" method vaccine combined with fowl pox vaccine and stick on skin or thigh, not in wing web. When mixing vaccines, use only one diluent.

B. The Bl type vaccine may be of use for poult 3 days of age if ND is considered a problem in poult on the farm. Not enough information on use of this type vaccine for breeders.

**Infectious Bronchitis**

Vaccines:

1. Killed not proved to be of value.
2. Live virus intranasal type--one drop placed in one nostril or eye.
3. Live virus drinking water vaccine.
4. Live virus dust or liquid spray vaccine.
Suggested vaccination:

1. Fryers
   A. Vaccination not recommended except on farms where IB is a continuous economic problem.
      1. One day of age use drop of vaccine in one eye of each chick, or
      2. Three days of age use drinking water method.
   Note: If fryers are to be vaccinated for IB, this should be done at an early age.

2. Replacement Flocks
   A. Vaccinate at 8-12 weeks of age. The eye drop, liquid spray, dust spray, or water methods of application may be used. The latter method is the one most generally used.
   B. Vaccination of pullets may result in the spread of bronchitis to other chickens on the farm. If you have chickens in egg production which have not been vaccinated for or had the disease, consult your veterinarian or laboratory before starting a bronchitis vaccination program.

Fowl Pox

Suggested Vaccination:

1. Chickens
   A. Fryers: It has not been found necessary to vaccinate fryers for fowl pox.
   B. Replacements: (1) Use the regular pigeon pox vaccine at the time the pullets are housed. Be sure to pull out about 30 feathers on the leg and brush the vaccine into the follicles.
      (2) A special pigeon pox vaccine now on the market may be used by the stick method. Vaccinate by this method anytime between 6 weeks of age and three weeks prior to egg production. This vaccine would be the one of choice for breeder flocks.

2. Turkeys
   A. Use regular fowl pox vaccine (chicken origin) at time breeders are blood tested or selected. Pox and ND vaccines may be mixed. Stick on back of thigh not in wing web.

Infectious Laryngotracheitis

Vaccination is recommended only when the disease has been diagnosed on the farm by a competent person or in special cases upon the recommendation of a poultry pathologist.