MAREK’S DISEASE
IN BACKYARD
CHICKEN FLOCKS

Marek’s disease, a widespread, highly contagious virus disease of chickens, paralyzes the wings and legs and/or causes tumors in various organs. It can also affect the bird’s nervous system. Death losses can be high and there is no satisfactory treatment, but the disease can be prevented by vaccination. Large commercial hatcheries routinely vaccinate day-old chicks, but some small-flock owners may be unaware of the need for Marek’s vaccination.

Incubation period. It takes four to 12 weeks for the disease to develop after a chicken is exposed to the virus, depending on strength of the virus and the variety and strain of chicken.

Course of the disease. Marek’s disease is most prevalent in young flocks. If non-vaccinated chicks are purchased or raised, the disease can become a serious problem by the time birds are 10 to 12 weeks old. Death losses may continue throughout the productive life of the flock.

Method of spreading. Marek’s virus is shed from skin and feathers and is found in secretions and droppings. The virus can persist indefinitely in feathers and dander in poultry houses and yards.

Mortality. Marek’s disease may eventually destroy 10 to 50 percent of your laying flock. Losses may not be as high in broilers and roosters because they are usually slaughtered by the time they are 14 weeks old, but even so losses can range up to 20 percent by this time. Also, birds seemingly healthy when slaughtered may be found to have tumors and should be discarded.

Symptoms. Chickens with Marek’s disease may show one or any combination of the following symptoms:

- paralysis of leg(s) or wing(s)
- depression, weakness, diarrhea
- tumors on feather follicles
- blindness, often in one eye
- pale, shriveled comb

Leg paralysis caused by Marek’s disease. This form of Marek’s which has been called “range paralysis” may affect one or both legs.
The ocular form of Marek's "gray eye" leads to blindness in one or both eyes. Color of the iris gradually changes from brown to gray, and the pupil becomes irregularly shaped (in normal chickens the pupil is round).

Marek's disease is sometimes confused with lymphoid leukosis, a tumorous disease of chickens that are over 14 to 16 weeks of age. Lymphoid leukosis does not involve the nervous system but causes "big liver" and/or tumors of other abdominal organs.

**Treatment.** None.

**Prevention.** Vaccination of day-old chicks at hatcheries greatly reduces the incidence of Marek's disease. When you buy chicks, ask for chicks that have been vaccinated for Marek's disease. They may cost a few cents more, but it is money well spent!

If you hatch your own chicks, vaccinate them before placing them under the brooder. The vaccine is injected under the skin high on the back of the neck.

The smallest quantity of Marek's vaccine you can buy contains 200 doses, but it only costs a few dollars and is worth getting even though you may have only a few chicks to vaccinate. Follow the instructions carefully and discard unused vaccine.

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The authors are W. F. Rooney, Farm Advisor in San Bernardino, Los Angeles and Riverside counties, and A. A. Bickford, Extension Veterinarian, University of California, Davis.