Fowlpox

By Lacey Hughett

Fowlpox is an old viral poultry disease found worldwide and first described in the 17th century. Several strains of the avian pox virus have been identified and named after the primary bird infected.

The cutaneous form presents signature lesions, often mistaken for fighting wounds, which appear first on the comb, wattles, and around the eyes of chickens, and on the head on turkeys. Yellow blisters scab over to form darker, wart-like growths. Additional lesions may appear on any area body part without feather covering. Scabs persist two to four weeks before softening and dropping off.

Eyes can swell shut, causing blindness for the duration of the disease. Isolate the bird and give water and food separately to prevent starvation or dehydration.

The diphtheritic form, also known as “wet pox” and “fowl diphtheria,” causes internal lesions on the mucous membranes of the mouth, throat, or trachea that interfere with food and water intake and may hasten dehydration and malnutrition. Respiratory status may become compromised. Generally, birds with wet form will not survive without intensive treatment.

After biting an infected bird, mosquitos can carry the disease for up to eight weeks and infect any bird that has not been inoculated. One bird can spread the disease through the entire flock through open skin or mucous membranes in situations like picking or fighting. Owners can mechanically spread the disease as well. The virus sheds from dropping scabs during healing. Birds of any age can contract the disease at any time of year. During mosquito season, dump standing water, add mosquito-repellant plants to the landscaping, and report dead wild birds to local mosquito control groups.

The diphtheritic form needs a veterinarian’s diagnosis, because lesions resemble many other serious poultry diseases, and different diseases require different mitigation.

No medications help, but performing basic maintenance can help birds fight the infection. If less than 20% of the flock shows symptoms, vaccinate the healthy birds to help control transmission. Several vaccinations are available over the counter. Follow administration directions on the package. Generally, chickens are vaccinated via the wing-stick method and turkeys get the vaccine brushed onto the surface skin of their thigh. Do not vaccinate birds who already show signs of the disease. Check birds a week after vaccination for swelling and scab formation at the site, which indicate successful inoculation.

In high-risk areas with a large mosquito population, vaccinate chickens and turkeys in the first few weeks of life with an attenuated (live virus) vaccine, and again in 12-16 weeks. Due to possibly mishandling the vaccine and infecting the flock, attenuated vaccines should only be administered by a veterinarian.

Once your flock has had an outbreak of fowlpox, then they are carriers for life.

What is it? A viral infection affecting mainly chickens and turkeys but can affect other avian species.

Causative Agent: Viruses in the family Poxviridae.

Incubation period: 4-10 days.

Disease duration: 2-4 weeks.

Morbidity: High.

Mortality: Low in cutaneous form (dry pox), higher in diphtheritic form (wet pox). If not controlled and treated appropriately, the mortality rate rises. Birds may simultaneously become infected with both types, which raises mortality.

Transmission: Primarily through mosquitos. Infected birds are highly contagious, and scab casings carry the fowlpox virus long after shedding.

Signs: Wart-like lesions on combs, wattles, eyelids, or feet, eyelid swelling, weight loss, decreased intake of food and water, and a reduction in egg production. Birds with diphtheritic form will have lesions in the throat and respiratory tract.

Diagnosis: Through a veterinarian or laboratory.

Treatment: There is no treatment; fowlpox usually resolves on its own or results in death. Vaccinations can prevent the spread of and the initial outbreak of the disease. Surviving birds will not become infected again but are carriers for life.

All information vetted for accuracy by Dr. Sherrill Davison, Poultry Specialist at University of Pennsylvania School of Veterinary Medicine.