Fowl Pox in Poultry

Written by: Dr. Jacquie Jacob, University of Kentucky

Fowl pox is a virus that can affect most types of poultry, including chickens, turkeys, ducks, pheasants, quail, ostrich, emu, rhea, and so on. Parrots and other pet birds can also be affected. Alternative names for this virus include the following:

- Chicken pox (not to be confused with the virus that afflicts humans; human chicken pox cannot affect poultry, and fowl pox does not affect humans)
- Sore head
- Avian diphtheria
- Bird pox
- Pox

Several species of mosquitoes can transmit fowl pox and play a significant role in spreading the virus from one flock to another. Mosquitoes ingest the virus when they feed on birds with fowl pox virus in their bloodstreams. The insects then spread the virus when they feed on healthy birds. Mosquitoes are the primary source of infection on poultry ranges. Mosquitoes often winter over in poultry houses, so outbreaks can occur during winter and early spring.

Fowl pox is also spread from bird to bird through direct contact. The virus is airborne and can infect birds through their eyes or skin wounds or when they breathe. Although the disease is contagious, it spreads slowly.

Clinical Signs

There are two forms of fowl pox: dry and wet. Birds can be infected with either or both forms of fowl pox. Mortality from both forms of the disease is usually low, but a fowl-pox infection can result in reduced egg production and poorer performance from the flock. Clinical signs vary slightly depending on the form of fowl pox:

- **Dry form:** Birds showing signs of the dry form have raised, wart-like lesions on unfeathered areas (head, legs, vent, and so on). The lesions heal in about two weeks. If the scab is removed before healing is complete, the area will be raw and bloody. Infected birds have ruffled feathers and appear lethargic (that is, not thrifty). The pace of growth in young birds might slow. Laying hens typically experience a drop in egg production.

- **Wet form:** Birds showing signs of the wet form have canker-like lesions in the mouth, pharynx, larynx, and trachea. These lesions can plug the trachea, and if a bird’s trachea becomes plugged, the bird will suffocate and die. Birds can also have discharge from the eyes.

Treatment

There is no effective treatment for fowl pox.
Prevention and Control

Prevention involves implementation of an effective biosecurity program and vaccination. Chickens are most commonly vaccinated with the pigeon pox vaccine. It is also important to control mosquitoes in the area where the birds are kept.