Avian influenza disease

Avian influenza is highly contagious and affects the respiratory, digestive and nervous systems causing huge economic losses.

Avian influenza virus is very sensitive to most detergents and disinfectants. The virus also looses infectivity after 15 minutes at 56 degrees and are destroyed after 1 minute only at 100 degrees. Avian influenza affects chicken, turkeys, ducks, geese and many species of wild birds but water fowl are resistant to avian influenza. The incubation period of the disease varies from a few hours to a few days depending on the strain, and dose of virus, route of exposure and the age of the birds.

Disease biology

Wild water fowl and domestic ducks are natural reservoir of avian influenza and carry the virus in their intestinal tracts and shading them in their faeces. The viruses are spread to susceptible birds through inhalation of virus particles from nasal respiratory secretions and from contact with faeces from infected birds. Contaminated feed stuffs, drinking water, equipments, feed trucks, egg flats and people carrying virus on their clothes and shoes can be another means of spread.

The disease manifests in two types. Low pathogenic avian influenza causes only mild symptoms such as ruffled feathers, a drop in egg production with little mortality while the highly pathogenic avian influenza spreads very rapidly and causes high morality.

Signs and management

Clinical signs include oedema of the head and neck, comb and wattles may be swollen and becomes blue because of cyanosis,

respiratory signs such as coughing and sneezing, sinusitis with nasal discharge, profuse watery diarrhoea, neurological signs such as torticollis and ataxia, bilateral swelling of the lower eyelids with watery discharge, haemorrhages on unfeathered area of the skin especially legs which have light red colour mixed with blue colour. In layers, affected birds may lay at first soft shelled eggs and then stop laying.

There is no treatment for affected birds but we can prevent our farms by carrying out proper bio security, avoiding direct contact with wild birds, at the end of each cycle remove the contaminated litter and disinfect the poultry house and all equipments, vaccinating chicks against avian influenza.